1975-06

A preliminary feasibility study of the establishment of a health maintenance organization on the Monterey Peninsula

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A PRELIMINARY FEASIBILITY STUDY OF THE ESTABLISHMENT OF A HEALTH MAINTENANCE ORGANIZATION ON THE MONTEREY PENINSULA

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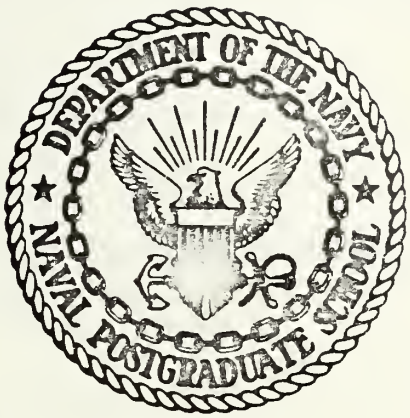

THESIS

A PRELIMINARY FEASIBILITY STUDY OF
THE ESTABLISHMENT OF A HEALTH MAINTENANCE
ORGANIZATION ON THE MONTEREY PENINSULA

by

Normand L. Charland

Arlene E. Mills

June 1975

Thesis Advisor: David R. Whipple

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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE

READ INSTRUCTIONS BEFORE COMPLETING FORM

1. REPORT NUMBER

2. GOVT ACCESSION NO.

3. RECIPIENT'S CATALOG NUMBER

4. TITLE (and Subtitle)
A Preliminary Feasibility Study of the Establishment of a Health Maintenance Organization on the Monterey Peninsula

5. TYPE OF REPORT & PERIOD COVERED
Master's Thesis; June 1975

6. PERFORMING ORG. REPORT NUMBER

7. AUTHOR(s)
Normand L. Charland
Arlene E. Mills

8. CONTRACT OR GRANT NUMBER(s)

9. PERFORMING ORGANIZATION NAME AND ADDRESS
Naval Postgraduate School
Monterey, California 93940

10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS

11. CONTROLLING OFFICE NAME AND ADDRESS
Naval Postgraduate School
Monterey, California 93940

12. REPORT DATE
June 1975

13. NUMBER OF PAGES
106

14. MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office)
Naval Postgraduate School
Monterey, California 93940

15. SECURITY CLASS. (of this report)
Unclassified

15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)
Approved for public release; distribution unlimited.

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)
Health Maintenance Organization (HMO)
Prepaid Health Plans (PHP)
Prepaid Group Practice (PPGP)
Monterey Peninsula Physician Distribution

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)
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DD FORM 1 JAN 73 1473 (Page 1)
EDITION OF 1 NOV 65 IS OBSOLETE
S/N 0102-014-6601

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

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A Preliminary Feasibility Study of the Establishment of a Health Maintenance Organization On the Monterey Peninsula

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MASTER OF SCIENCE IN MANAGEMENT

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I. INTRODUCTION

Americans spend more on health care than the people of any other nation in the world. This annual total has now reached approximately $70 billion or some 7% of the gross national product [Campbell]. This certainly makes health care one of the largest industries in the country. Thus, there exists widespread concern since it is widely agreed that the field is now in a crisis within the United States: "It is painfully obvious to even the most casual observer that something is wrong with at least the distribution of health care in the United States, and probably with the production process as well." [Whipple, p.1] For example, the ratio of physicians per 100,000 population in 1973 varied from 77 in Alaska to 429 in Washington, D.C. Facilities are similarly poorly distributed. There is little control over the production process, or even agreement on how to evaluate the cost. In many areas there is poor utilization of the physician's time and little or no use of physician extenders. The physician is therefore doing tasks that could be accomplished by someone with far less training. Many complex factors are involved in the cause of this crisis, not the least of which is steeply rising costs. From 1966 to 1970, charges for general medical services rose 29% while daily hospital service prices jumped 71% [Campbell].

The military health care delivery system has not been insulated from its share of problems. With the loss of the physician draft the connection to the private sector's system and associated markets was strengthened. Costs have been rising and drastic changes to the structure of the delivery system proposed. These include the shift of dependent care to the private sector through CHAMPUS. This would idle portions of military facilities in various areas and cause strain on the private delivery system.

The authors of this paper believe that a Health Maintenance Organization is one way of meeting many of the problems of distribution, production and rising costs. To evaluate this belief, it was decided to examine the health care delivery system of the Monterey Peninsula in some detail, locate the problems that exist and present alternative HMO models to meet these problems.

Part II of the thesis defines HMOs, and then traces the evolution and growth of the HMO concept including advantages, disadvantages and summaries of some of the laws that impact on the establishment of this type of system.

Part III presents the details of the situation as it now exists on the Peninsula, both in terms of supply of the various military and civilian facilities and personnel involved in the delivery of health care, and problems inherent in the system.

Part IV then describes the feasibility of actually establishing an HMO in this area in terms of possible enrollment populations. In this section are presented three alternative

models of HMOs (one including novel use of idled military facilities) and a discussion of problems which may be encountered during the implementation of such plans.

Finally, in Part V, the significant information is summarized and evaluated. While a single specific answer cannot be provided for the Monterey Peninsula on the basis of these findings, suggestions are made for further studies which are beyond the scope of the present effort.

II. EVOLUTION OF HEALTH MAINTENANCE ORGANIZATIONS

A. DISCUSSION AND HISTORY

The Health Maintenance Organization (HMO) is one of the most discussed and written about health care concepts of today. Many definitions for an HMO are found in the literature. From these we have derived the following one which we shall use for the purposes of this paper: a health care delivery system, organized to provide a comprehensive set of agreed upon services for health maintenance and treatment for a prepaid, fixed rate for an enrolled group of people.

The HMO comes in a variety of forms dependent on the needs of the community which it serves and the availability of resources to meet those needs. To establish an HMO may require a considerable expenditure of funds. The federal government has attempted to encourage formation of this type of health care delivery by the passage of Public Law 93-222, the Health Maintenance Organization Act of 1973, which provides funds for the development of "qualified" HMOs throughout the country. However, the law specifies certain requirements for qualification that tends to discourage its use and thus counteracts its advantages. This law is explained more fully later in this section.

The HMO is not an entirely new idea. Despite the heavy proportion of the recent publicity,it has a long history. Several events have influenced the growth of the HMOs.

A major impetus in the eventual advancement of HMOs was the formation of Blue Cross and Blue Shield, as nonprofit insurance plans that at least partially paid for services but did not directly provide them. Health insurance gained further ground during World War II, and these early successes stimulated rapid growth in the health insurance industry so that approximately 85% of the U.S. population is at least partially covered by some type of hospital insurance [MacLeod].

Another force affecting HMOs has been the recent rapid growth of group medical practices, some of which have formed the professional basis for the HMOs. The Medical Group Management Association (MGMA) defines a medical group practice as "an organized medical group of three or more licensed doctors of medicine, with common facilities, actively engaged in the practice of medicine and who shall employ a person or persons in the active supervision of its business affairs." [MGMA, ch. 5, p. 1] MacLeod and Prussin report that the American Medical Association (AMA) records show that there were only two such groups in the country in 1900. In 1930 the number increased to 150, to 506 by 1943 and to 1,956 by 1959. There were 4,189 groups in 1965 and 6,371 in 1969. If this trend continues, the prevailing mode of health care will be group practice by the 1980's [MacLeod]. There are three general types of group practices; single specialty, multi-specialty and general practice. Each type of group offers advantages of combining staff and administrative services,

but the multispecialty group offers the additional advantage to both physicians and patients of ready availability of consultative services.

The MGMA, in the Clinic Manager's Manual, further breaks down the 1969 statistics. The 6,371 medical groups were composed of 40,093 physicians. Of these groups, nearly half (3,169) were single specialty. Multispecialty clinics (2,418) and general practice clinics (784) made up the remainder. Exhibit 1 summarizes the sizes of clinics surveyed by the AMA in 1969 [MGMA]. As can be seen from the exhibit, as the number of physicians in the group increases, the percentage of multispecialty groups also increases. They comprise 38% of groups of all sizes, 25% of the 3-4 physician group, 47% of the 5-7 size, 76% of the 8-15 size, 95% of the 16-25 size, 98% of the 26-49 size and 100% of groups of 50 or more physicians. The statistics in this exhibit do not indicate a trend, only a picture of the situation in that particular year.

The first recorded evidence of an HMO dates back to 1929 when a prepayment mechanism was linked to a group practice for the Farmers Union-Cooperative Health Association in Elk City, Oklahoma. During the next few decades several other group practice prepayment plans (GPPPs) began operating. Among some of the better known plans are: Ross-Loos Medical Clinic in Los Angeles, California (102,000 enrollees), Group Health Association in Washington, D.C. (85,000 enrollees), the Kaiser-Permanente Medical Care Programs located in

TYPE OF GROUP	ALL SIZES	SIZE OF CLINIC					
		3-4	5-7	8-15	16-25	26-49	50 & Over
All Groups	6,371	4,139	1,315	616	154	97	50
Single Specialty	3,169	2,380	640	140	7	2	0
General Practice	784	718	61	5	0	0	0
Multispecialty	2,418	1,041	614	471	147	95	50
All Physicians	40,093	13,860	7,405	6,326	3,054	3,287	6,161
Single Specialty	13,053	7,941	3,576	1,341	128	67	0
General Practice	2,691	2,325	320	46	0	0	0
Multispecialty	24,349	3,594	3,509	4,939	2,926	3,220	6,161

MEDICAL GROUP CLINICS IN U.S. - 1969

EXHIBIT 1

California, Oregon, Hawaii, Washington, Ohio and Colorado (2.5 million enrollees), the Group Health Cooperative of Puget Sound in Seattle, Washington (170,000 enrollees), the Health Insurance Plan of Greater New York (780,000 enrollees) and the Group Health Plan of Minneapolis, Minnesota (50,000 enrollees) [Ibid.].

B. BASIC PRINCIPLES

There are a number of basic principles that have evolved over the years for developing an effective HMO plan.

1. Provider Responsibility

The provider of an HMO must provide a high quality health care service to the enrollees at a competitive cost. Note the difference between this and an indemnity insurance program. The HMO must actually provide, not just pay for, the necessary services to maintain health around the clock, seven days a week to its enrollees, while the indemnity plans merely make full or partial payments for covered services when rendered to the insured by some portion of the delivery system at large. Even if the service required is not directly available within the HMO group, the sponsor has a contractual responsibility to arrange for that needed service.

2. Prepayment

A fixed periodic (usually monthly) amount is paid in advance to the HMO plan by the member, or on his behalf by an employer, union trust fund, or some similar organization. We shall term this the "premium" throughout. The payment of

the premium amounts to payment in advance for delivery of health care services that might be required during the contract period.

3. Physician Autonomy

The physicians providing care under the HMO plan, whether a closely knit multispecialty group or a coalition of individual practitioners, should be autonomous in exercising discretion in clinical matters and in providing quality assurance. Since the quality of care provided by individual physicians in the plan has an impact on the overall enrollment and costs, peer review of everyone's performance should lead to continual evaluation and improvement in the quality of care provided. That is, within the HMO, the physicians themselves can organize their own system of peer review which is a periodic evaluation by the group of all medical procedures delivered by them to the enrollees to insure that certain standards set by the group are met.

4. Utilization Incentive

Instead of charging a fee for each service, the HMO collects a sum in advance from the subscribers for services to be performed in the future and compensates the physicians through some sort of patient capitation or straight salary arrangement. Capitation is a method of compensation to the provider of health care whereby for each individual (or family) he receives a single payment covering a specific time period, regardless of the amount of service rendered to that individual or family during the period [DHEW (HSM) 73-3027]. It therefore behooves the physician to encourage preventive

measures, early detection and the most efficient treatment of disease since there is no financial gain in providing as many sophisticated services as possible. With capitation prepayment there is no additional reimbursement for patients hospitalized or who undergo complex medical or surgical procedures as there is in fee-for-service. The prepayment also encourages enrollees to see their physician more often since the number of visits does not increase their cost. This gives the physician the opportunity to stress health maintenance rather than being forced into crisis-oriented medical care.

5. Dual Choice

Dual choice is a basic part of a prepaid HMO program because no captives are wanted in the program, only volunteers. It is also necessary for qualification under the Public Law. Prospective enrollees should be free to select either the HMO or an existing indemnity-type program. Giving the enrollee a choice of plans and the option to opt out of the HMO if he is dissatisfied, make the HMOs more responsive to the members. The HMO services must satisfy the member or lose him to another plan.

> Dual choice creates a calm atmosphere during any enrollment period because people who are satisfied with their present coverage or who do not wish to disturb existing relationships with physicians, need not consider this new option...Employers can be at ease knowing that there can be a smooth transition from one type of coverage to another among those employees who elect to join the ppgp program. [Biblo]

6. Comprehensive Coverage

Most HMOs provide for comprehensive inpatient and outpatient care including diagnostic and X-ray services. Several other benefits such as dental, drugs, mental health, vision care and home care are available depending on the type of plans offered. (These services are required under P.L. 93-222.) Doctor Paul O'Rourke summarizes it well in his Richmond Model Cities paper,

> The innovative delivery system combines all known approaches to health care in a much improved pattern of organization which is compatible with the interests and convenience of patients and professionals alike. The emphasis is on prevention, patient education, early diagnosis and treatment, and the care of many illnesses in several environments which provide less costly care than in the general hospital without compromise in quality of care provided. [O'Rourke, p.2]

C. ORGANIZATIONAL STRUCTURES

There are various organizational structures. Basically an HMO consists of four divisions.

1. Basic Divisions

a. Medical Staff

One part is a Medical Staff to actually provide the health care services. When the HMO is first organized, this staff may consist of a small core of primary care physicians, a general surgeon, nurses, and paramedical personnel. Other specialist care, laboratory and radiology may be provided by contract with existing facilities in the area. As the plan grows and enrollment increases, additional professional staff would be added and less contracting would be required.

"A widely accepted rule of thumb is that the break-even point for a prepaid group practice plan is in the range of 20,000 - 30,000 enrollees." [DHEW (HSA) 74-13009]. More will be said about this later in the thesis. For 20,000 enrollees the optimal physician requirements, according to an HEW survey, for a small hospital or non-hospital based plan would include:

General Practitioners	6
Internists	6
Pediatricians	3
OB-GYN	2
General Surgeons	3

Services to be provided by contract would include orthopedic surgeons, urologists, ENT, dermatologists, psychiatrists, anesthetists, ophthalmologists, pathologists and allergists. [BHRD/RAS 74-192] HEW

b. Administrative Organization

Another part is an administrative organization to coordinate all the elements of the HMO. For example, this might be a medical group, a private not-for-profit corporation, a private for-profit organization, a labor union, a medical school, a consumer co-op, etc. This organization may be very autonomous or may provide an overseeing board composed of members of the professional staff, the enrollees and the administration as required to qualify under PL 93-222. This administrative organization would be responsible for fiscal control, personnel policies, provision perhaps by contract

for those services not physically provided by the plan such as specialists, lab and X-ray services, hospital beds and the physical facilities in which to provide primary care and the routine administrative tasks. A marketing arm to sell the program, recruit new subscribers and provide public relations services may be part of the administrative organization or it may be completely separate.

c. Hospital Beds

A third part is the provision of hospital beds. Most existing HMOs are hospital based, that is, a hospital is the center of operations. Building of a hospital as part of an HMO requires a high initial capital outlay that will need a large enrollment over which to distribute the cost before the break-even point can be reached. Non-hospital based HMOs may contract with existing hospitals for beds if such are available, eliminating the high initial capital outlay and allowing the HMO to reach the breakeven point with a smaller enrollment. Medical foundations also are non-hospital based. They are controlled by city, county or state medical societies, and collect an annual fee covering subscribers hospitalization and basic medical services. Subscribers to the plan arrange for care with a member physician who in turn bills the foundation on a fee-for-service basis. Hospital bed arrangements in this case are handled by the physician again eliminating the high initial capital outlay.

d. Consumers

The fourth and perhaps most important part is the consumer or enrollee. Without them there is no HMO. Their role in the organization may be limited to payment of premiums and consumption of services or they may be very active in policy making on the board of control.

2. Models

These parts may be combined in different ways for a variety of models. Carstens and Whipple [pp. 11,12] delineate five possible types of HMOs:

> 1. A HMO operated by a profit making enterprise which pays doctors on a fee basis and independently owned hospitals on a cost for service basis. (A Consolidated Medical Systems type plan.)
>
> 2. A non-profit HMO which establishes a fee basis for participating doctors and compensates hospitals on a cost for service basis. (A San Joaquin Foundation for Medical Care type plan.)
>
> 3. An independently owned HMO operating on a non-profit basis which owns its own plant and directly employs its staff. (A Kaiser type.)
>
> 4. A non-profit community-labor HMO operating its own facilities and employing its own staff. (A Martinez, California plan.)
>
> 5. A profit making HMO employing its own staff and utilizing local hospitals on a cost-of-service basis. (A California Medical Group type plan.)

Thus, the physician may be paid on one of a variety of bases. A traditional fee-for-service plan might be used, straight salary within minimum and maximum patient load limits, capitation as defined previously or possibly a combination. The advantages of capitation have been discussed previously.

D. ADVANTAGES OF HEALTH MAINTENANCE ORGANIZATIONS

There are posited advantages of HMO type care over non-HMO care.

1. Hospitalization and Surgery Reduced

A study by the U.S. Department of Health, Education and Welfare, involving 8,000,000 Federal employees and beneficiaries who had a choice between indemnity health insurance or an HMO, consistantly revealed lower hospital utilization and fewer surgical procedures among HMO patients. The hospitalization rate for HMO enrollees was less than half that of those covered by conventional health insurance programs [MacLeod, p. 445].

Because of the cost differentials, any time care can be given on an outpatient vice inpatient basis there will be a saving in cost. When patients are hospitalized they require hotel type services plus that of professional nursing staff on a twenty-four hour basis, rather than the smaller number of inputs or resources required by outpatient or ambulatory care.

A comparison of in-hospital surgical procedures during 1968 between Blue Shield's broad-coverage benefit plan and GPPP's showed a more than 150% higher tonsillectomy rate for Blue Shield than for GPPP. Female surgical procedures revealed 9.2 per thousand annually for Blue Shield as compared to 4.8 for GPPP. Figures for all surgical procedures showed 75 per thousand members for Blue Shield and 34 per thousand for GPPP.

> Thus, the comparative studies that have been made strongly indicate that prepaid group practice plans help contain inflation in medical-care costs, lower the total cost of medical and health-care services to the individual enrollee and clearly reduce unnecessary hospitalization and elective surgery without sacrificing the quality of care. [MacLeod, p. 442]

> The money HMO's save on hospital costs can result in lower overall medical expenses for subscribers. A recent study in California showed that total medical costs for one year among families subscribing to two HMO's in the Los Angeles area were $124 less than those for families with Blue Cross-Blue Shield. Members of a new HMO at Columbia, Md., purchase a representative package of medical and hospital coverage for $169 less than it would cost with a typical insurance policy. [Consumer, p. 758]

There are two factors in an HMO that exert controlling influences on hospitalization rates. Roemer states that the most effective mechanism seems to be the bed supply. It has been suggested that HMOs provide beds on the basis of 1 per 1000 enrollees. Another factor is the frequent use of salary or capitation payments to physicians which eliminates extra payment for extra services such as surgery or hospital visits. Diagnostic admissions would be limited and patient stays would be shortened by both of these factors. Carstens and Whipple compared admission rates (See Exhibit 2) among three groups in San Diego County and their results confirm this position.

COMPARATIVE ADMISSIONS PER 1000 ELIGIBLES

U.S. Navy	140
Kaiser	110
Blue Cross . . .	260

EXHIBIT 2

This position was also verified by a comparison of utilization by Federal employees covered by Blue Cross/Blue Shield vice those covered by a prepaid plan [Reidel, pp. 18,19].

2. Increased Preventive Care

An HMO emphasizes preventive care and early detection of diseases thus in some cases avoiding more serious illnesses in the future.

> The University of California School of Public Health studied whether patients in two established HMOs in Southern California received more preventive services than did fee-for-service patients. Hospital and medical records were traced for physical checkups, well-child examinations, Pap smears, chest X-rays, routine rectal examinations, blood tests for syphillis and immunizations. The investigators computed a "preventive service index" which ranged from zero (no service) to 1.0 (maximum provision of preventive services). The higher the number, the more services a patient received. The index was .348 for commercial insurance subscribers, .404 for Blue Cross-Blue Shield members and .452 for HMO patients.
>
> Another study reviewed the frequence of physical examinations among a controlled population in Alameda County, California. While 58% of the men enrolled in a local Kaiser-Permanente plan had such a check-up in the preceding year, only 43 to 46% of those with conventional policies had one. Among women, the score was 63% for HMO members versis 49 to 57% for conventional insurance subscribers. [Consumer].

A study of the Health Insurance Plan of New York (HIP) comparing death rates of Old Age Assistance recipients receiving care from HIP with a similar age group receiving care under the traditional fee-for-service showed the HIP patients had a 13% lower death rate [Ibid.]

3. Economies of Scale

The centralized structure of an HMO cannot only save money in bulk purchase of drugs and supplies and the common

use of expensive equipment, but can save time and administrative headaches through a central record system. Also having available at one location the services of family practioners and specialists would reduce transportation expense and time lost from work and delays in treatment due to referrals. The patient is thus also the beneficiary of the combined medical knowledge of the HMO physicians as a result of the frequent professional interface and informal consultations on problem cases. Referring to advantages of group medical practice MGMA says, "The cooperative association of a group of physicians with the attendant benefits of the free exchange of ideas, consultation, and conference is the number one advantage." [MGMA, ch. 5, p. 3]. Among medical economists, there is little agreement on a method of studying and analyzing the hospital and medical cost functions to determine whether or not economies of scale exist. Berki has summarized the entire controversy in this way, "depending on the methodologies and definitions used, economies of scale exist, may exist, may not exist, or do not exist, but in any case, according to theory, they ought to exist." [Berki, p. 115].

4. Quality Assurance

Recently the Group Health Association of America (GHAA) surveyed a group of 45 HMOs for the Federal Government. The results showed that 19 of the 45 HMOs sampled "required board-certification or board-eligibility of their doctors." [Consumer, p. 760] A "board certified" specialist is a

physician who has completed a course of advanced study and practice in his chosen field as prescribed by the specialty group and passed a special state medical board exam. A "board eligible" physician is one who has completed the advanced study and is "eligible" to take the special state board exam. In 11 of the 45 HMOs surveyed, staff physicians had "teaching responsibilities on a hospital faculty, which often indicates a continuing interest in medical education and developments." [Consumer p. 761]. The GHAA also found that 32 of the 45 HMOs in its survey had:

> Formal programs in which doctors regularly review one another's work...A quality assessment committee at the Group Health Association of Washington, D.C., for example, reviews the records of 40 patients every two weeks to check doctor performance. Kaiser-Permanente sends a team of physicians from one of its medical centers to another each month to review records. [Ibid.]

Another plus for HMO quality assurance found by the GHAA survey was that "Thirty seven of the 45 HMOs surveyed had either subscriber representatives on the board of directors, a consumer advisory council, or a formal grievance committee that included consumer representatives." [Ibid.] This type of participation gives consumers an effective voice in policy matters.

E. DISADVANTAGES OF HEALTH MAINTENANCE ORGANIZATIONS

There are some possible disadvantages to the HMO. We have indicated that there is a financial incentive for a fee-for-service physician to provide too many services.

1. Provision of Too Few Services

On the HMO side of the coin, the incentive may be to provide too few. More of a physician's time and effort is required to care for a patient in the hospital and cuts down on the number of persons he can care for in the clinic. He may therefore be tempted to treat a patient too long as an outpatient. He may also tend to hurry through his appointments to see more patients and if, as at Kaiser, there is a bonus at the end of the year if costs are kept down, he may not order all of the lab and X-ray studies needed for accurate diagnosis.

Fortunately, there are checks against following that avenue. First, since enrollees can opt out of the plan, they would leave the HMO if they felt they were not receiving adequate care, secondly there is the matter of malpractice suits, and thirdly a neglect of basic care would increase hospitalization, thus draining the profits which are the incentive for more efficient care. The first and second, of course, depend on the consumers' awareness of what is adequate care and of what is grounds for a malpractice suit. It is the responsibility of the HMO to educate its members regarding what they should expect from the organization.

2. Limitation of Choice of Physicians

Next, the HMO concept limits a member's choice of physician and hospital to those included in the plan (except for referrals). Some people have a great deal of faith in their family physicians and the personal relationship they

have with him. Weinerman, in a paper written in 1964 indicated that although there was overall satisfaction in patient attitude toward prepaid group practice plans, there were many complaints about the impersonality of the doctor-patient relationship in a clinic setting.

> In general, the various investigations of attitude of group health members suggest much appreciation for the technical standards of group health care but less satisfaction with the doctor-patient relationship itself. In one way or another patients report disappointment with the degree of personal interest shown by the doctor and with the availability of his services when requested. Much more rarely is the criticism of the quality or the economics of group health care. [Weinerman, p. 886]

F. "QUALIFIED" HMO UNDER PL 93-222

In December 1973, Congress passed the act which presented in detail the requirements which a health delivery system (in particular an HMO) would have to meet to qualify for Federal financial assistance. There are three types of financial assistance offered. First is provision of grants and contracts for HMO feasibility studies under Section 1303. Funds are not available to for-profit organizations under this section. Secondly, in Section 1304 there is a provision for grants, contracts and loan guarantees for planning and for initial development. In this case, loan guarantees are available to for-profit groups if they are designed to serve a substantial proportion of the medically underserved. Section 1304 also requires that a minimum of 20% of the grants be for rural or non-metropolitan areas. Finally, loans and loan guarantees are provided for initial operating costs of HMOs; as before,

for-profit organizations can qualify only for loan guarantees. The purpose of the loans in this section (1305), is to meet the amount by which costs exceed revenues in the first 36 months of operation. By that time it is expected that the HMO should break even. The restriction of 20% being from rural or non-metropolitan areas exists in this section. The Monterey Peninsula would probably be considered as a non-metropolitan area since the Office of Management and Budget defines it as one which contains no city whose population exceeds fifty thousand population. In all of these financial grants is the stipulation that "not less than 30 percentum of its members will be members of a medically underserved population." (Section 1303) Before any grant can be approved, the HMO must provide an evaluation of support from the community -- potential consumers, sources of operating support and professional groups. Grants would also be correlated with the Comprehensive Health Planning agencies.

The health care services which must be provided are listed in Sections 1301 and 1302. Basic health services include physician services, inpatient and outpatient hospital services, emergency services, short term outpatient and crisis intervention mental health services, medical treatment and referral for abuse of or addiction to alcohol and drugs, diagnostic laboratory and diagnostic and therapeutic radiologic services, home health services and preventive health care. Supplimental health services include intermediate and long term care, vision care, dental care, extended mental health services, long term physical medicine and rehabilitation, and prescription service.

A basic health services payment covers the previously listed "basic" services and payment for the "supplemental" services would be an extra payment.

Payment for the chosen level of health care is to be made on a periodic basis regardless of the usage level, in other words, payment is made even if no services are used and the same payment is made if frequent use is required. This is the difference between prepayment and fee-for-service medicine. The amount of the payment is also not dependent on the frequency of usage and is to be based on a community rating system. Provision is made for the use of a co-payment feature as long as it does not constitute a barrier to use of the system. Co-payment refers to such type of payment as a deductable. Or it may be a nominal payment for each office visit to discourage possible overuse of the facilities.

The law provides that health care services (basic and supplemental) be available twenty four hours a day, seven days a week for service, "when medically necessary". (Section 1301, (b), (4)). This would not mean that the HMO be open and fully staffed all the time but that provision be made at least for medical evaluation of the need for care.

The operations of the HMO must be fiscally sound and it can obtain insurance to cover patients whose expenses in any one year exceeds $5000 and for services provided by necessity to its members by sources outside the organization. It must enroll a broad demographic representation of the population except that not more than 75% of its potential enrollment

population can be from the medically underserved unless the HMO is also in a rural area. To be designated as "medically underserved" would require action on the part of the Secretary of HEW. The HMO must have a 30 day open enrollment period once a year and accept new members as they apply unless it can demonstrate a potential economic disaster due to a very high utilization group which would be likely to enroll, or if it would not be able to comply with the broad representation requirement. Section 1307 includes Medicare and Medicaid recipients as potential members and states that they may be offered fewer benefits than regular members. This seems contrary to the intent of the HMOs to provide better care to its members rather than less, and these are high need and often underserved people.

For the protection of the members, the HMO may not expel or refuse re-enrollment because of usage level or health status. The members must be represented on the policy-making body of the HMO, including adequate representation of the medically underserved. Procedures for hearing and resolving grievances between members and providers, and for assuring the quality of the services provided must be incorporated into the organizational structure. Medical social service assistance must also be available to the members. The Secretary of HEW is empowered for the protection of the members to take action against any HMO that does not provide prescribed services, even when not federally funded.

Arrangements must be made for continuing education of the professional staff which also enhances the quality of the care provided.

Statistical and other reports must be prepared to be forwarded to and reviewed by the Secretary of HEW. These reports would probably not be much different from the regular financial and service reports that the HMO would make to its members. This is another aid to guarding the rights and privileges of the members.

Section 1310, which can be referred to as the dual choice provision, has aroused some concern, especially in unions that provide health care to their members through a health and welfare fund. The section mandates that where a "qualified" HMO is located, employers of over 25 people shall offer the HMO as an option. On the surface it seems rather innocuous, but clarification is required to make it possible for the unions to act as surrogate for employers to pay for the health plans where the health and welfare funds exist. Also, many of these plans have quality assurance mechanisms established. There would be no problem as long as the HMO's quality assurance program meets or exceeds those of the unions, but certainly the unions should expect nothing less.

Finally, the Federal law preempts state laws that inhibit or prohibit the development of these federally funded HMOs and makes it possible to organize them in states where it was not possible before.

G. THE MEDI-CAL REFORM BILL OF 1971 (PHP LAW)

The Medi-Cal Reform Bill of 1971 was an attempt by former Governor Ronald Reagan to reduce Medi-Cal costs by changing the fee-for-service system of claim reimbursement to a pre-paid financing system. It encouraged the formation of pre-paid units called "Pre-Paid Health Plans" or "PHPs", and issued contracts to them allowing a PHP to enroll up to a certain maximum number of Medi-Cal eligibles within a specific geographical area. The PHPs were paid in advance a monthly fee for each enrollee to provide that enrollee's health care needs. To create competition, PHPs were sometimes assigned to the same or overlapping areas. The "prior authorization" clause requiring Medi-Cal eligibles to get prior approval from the State before they could receive certain kinds of treatments, was dropped for PHP enrollees. The same was true for the provision restricting patients to two doctor visits and two prescriptions per month unless authorization was granted by the State to exceed that number.

We feel that Governor Reagan's intentions were good and his ideas sound. His program appears to have failed because of poor initial planning and lack of proper administration. The plan appears to have been greatly abused leading to news headlines hinting at scandal. Governor Brown shortly after his inauguration ordered a moratorium on PHP contracts and has ordered an investigation of the system. A new two year study to reassess the value of California's prepaid Medi-Cal health plan has been undertaken.

H. PROFESSIONAL STANDARDS REVIEW ORGANIZATIONS UNDER PL 92-603

In 1972, Public Law 91-603 was passed by the Congress, "to promote the effective, efficient and economical delivery of health care services of proper quality for which payment may be made under this Act" (Section 1151), that is, the Social Security Act. This means that any HMO which wishes to include Medicare and/or Medicaid patients in its enrollment would be required to submit its records and practices to the local Professional Standards Review Organization (PSRO). The United States is divided into areas in which PSROs are designated -- usually state or county medical societies. In any state having three or more local PSROs there is also a Statewide Professional Standards Review Council (SPSRC) which coordinates the activities and disseminates information and data among the local PSROs. Institutions and individuals who are not satisfied with determinations by the local PSRO can appeal to the SPSRC. There is also a National Professional Standards Review Council (NPSRC) which provides technical and professional consultative assistance to both state and local organizations.

The duties of the local PSRO are threefold.

1. To review professional activities to determine whether the services provided are or were medically necessary; if the quality meets professionally accepted standards of care - established by the PSRO - and if they were provided in the most appropriate and efficient place. For instance could

inpatient care have been provided on an outpatient basis just as effectively?

2. To provide advance determination of the necessity of elective admissions, extended care or costly courses of care, and to determine and publish for the information of the local physicians a listing of the types and kinds of cases to be considered. Hopefully, this would eliminate or at least diminish unnecessary admissions, also one of the aims of the HMOs.

3. To arrange for maintenance and review of profiles of care and services to be utilized for establishing and changing standards of care to reflect new knowledge. These profiles would be developed for varying disease entities and patient differences.

The membership of the PSRO is made up of physicians or osteopaths duly licensed to practice in the area and with staff privileges on at least one hospital in the area. They may not review the records of any patient they have been even partially responsible for or a hospital in which they have staff privileges.

If the PSRO finds a provider to be failing in a substantial number of cases to give proper care or who has demonstrated an unwillingness or lack of ability to do so, this provider may be excluded from eligibility for reimbursement for care given. Each case is reviewed by the SPSRC and the Secretary (HEW) prior to this decision. The violator may also be subject to a fine. If he is dissatisfied with the handling of the

case and the decision he may subject the case to judicial review.

The Monterey County Medical Society at this writing is in the process of establishing a PSRO for the County. At present 56% of the local physicians have asked to be enrolled and this number is expected to reach 70% before implementation of the plan. Membership of the actual review board of the PSRO will be on a rotation basis and according to the expertise of the physician. Hospitals will maintain their own review board under the supervision of the County PSRO. Implementation is expected within the next two or three months.

III. AVAILABILITY AND ACCESSIBILITY OF HEALTH CARE FACILITIES ON THE MONTEREY PENINSULA

When we refer to the Monterey Peninsula we mean the area which includes Marina, Sand City, Seaside, Fort Ord, Del Rey Oaks, Monterey, Pacific Grove, Pebble Beach, Carmel and Carmel Valley.

A. SUPPLY OF HEALTH CARE FACILITIES AND PERSONNEL

1. Physicians and Dentists

The Peninsula has a total of 180 physicians and 101 dentists. Exhibits 3 and 4 show a breakdown of specialties and subspecialties by area. As can be seen from the exhibits, most of the specialists in both medicine and dentistry are concentrated in Monterey. Marina is entirely without medical facilities and personnel but three dentists are available. In addition, the physicians in Monterey are concentrated in an area within approximately three blocks of Monterey Hospital, Ltd.

Our research indicates that there are three medical groups practicing on the Monterey Peninsula. These are groups that satisfy the MGMA definition previously quoted. Two are multispecialty groups, one in Pacific Grove, the other in Monterey.

In an attempt to evaluate the adequacy of the physician population on the Monterey Peninsula, a maldistribution index was calculated for each specialty and for general practice.

PHYSICIANS - Specialties and Subspecialties on the Monterey Peninsula

Specialty Area	Monterey	Carmel	Pacific Grove	Seaside	Carmel Valley
Pediatricians					
General	6		2		
Cardiology	1				
Allergy	1				
Internal Medicine					
General	12	2	3		
Cardiology	2		2		
Allergy	1	1			
Hepatology	1				
Gasteroenterology	1				
Geriatrics	1				
Endocrine and Weight Control		1	1		
Pathology	4				
Radiology	2	6			
Surgeons					
General	8		1		
Thoracic and Vascular	3				
Neuro-	3				
Orthopedic	7	1			
Plastic	2		1		
Vascular	1		1		
Oncology		1			
OB-GYN	16		1		
Anesthesia	8				
General Practice	12	5	2	2	3
Genito-Urinary	5				
Eye	9				
Family Practice	6	3	1	1	
Neuro-Psychiatry					
Neurology	1				
Psychiatry	9	6	1	3	
Dermatology	5				
ENT	2				
Primary Care Physicians					
General Practice	12	5	2	2	3
General Internal Medicine	12	2	3		
Family Practice	6	3	1	1	
General Pediatrics	6		2		
OB-GYN	16		1		

EXHIBIT 3

DENTISTS On the Monterey Peninsula

	Carmel	Monterey	Seaside	Pacific Grove	Marina
General	17	44	9	7	3
Orthodontist*	2	8	2		
Children		2	1		
Periodontist		3			
Oral Surgery		3			

* Two of these dentists have offices in two cities.

EXHIBIT 4

$$MI = \frac{\frac{P_s}{126,000}}{\frac{T_s}{205,088,000}}$$

P_s = number of physicians of specialties on Peninsula
T_s = total number of physicians of specialties in U.S.
126,000=population of Peninsula
205,088,000 = population of U.S.

For nine specialties, the index was greater than 1, indicating an excess compared to the rest of the U.S. Four specialties and General Practice were equal to 1, and three were less than 1 showing a comparative deficit. The results are shown in Exhibit 5. The number of physicians per 100,000 population on the Peninsula is 143. Exhibit 6 shows this ratio for all the states.

2. Hospitals

The Peninsula also has three hospitals, Community, Monterey Ltd., and Silas B. Hayes Memorial Army Hospital at Fort Ord. Community is a voluntary, not-for-profit, acute, general hospital, governed by a 15 member board of trustees and directed by an administrator who works closely with the President of the Medical Staff and the President of the Auxiliary Staff. See Exhibit 7.

COMMUNITY HOSPITAL

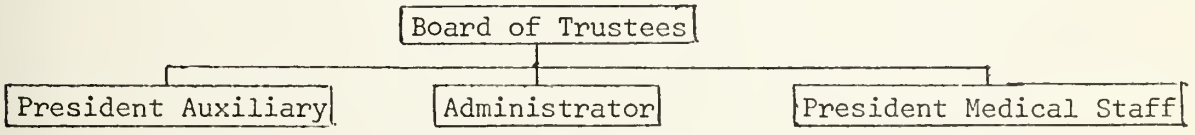


EXHIBIT 7

Maldistribution Index for Specialties represented on the Peninsula

Greater than 1 -	Anesthesiology	1.6
	Neurosurgery	2
	Eye	1.4
	Orthopedics	1.2
	Plastic Surgery	2
	Neuro-psychiatry	2
	Thoracic Surgery	4
	Urology	1.3
	Dermatology	2
Equal to 1 -	General Practice*	
	Internal Medicine	
	Pediatrics	
	OB-GYN	
	Radiology	
Less than 1 -	ENT	.67
	Pathology	.6
	General Surgery	.7

* Includes Family Practice

EXHIBIT 5

NUMBER OF PHYSICIANS / 100,000 POPULATION IN THE U.S. BY STATES

1973 STATISTICS

Alabama	94	Kentucky	109	North Dakota	93
Alaska	77	Louisiana	124	Ohio	138
Arizona	163	Maine	118	Oklahoma	104
Arkansas	96	Maryland	200	Oregon	153
California	200	Massachusetts	222	Pennsylvania	157
Colorado	177	Michigan	131	Rhode Island	168
Connecticut	204	Minnesota	156	South Carolina	98
Delaware	143	Mississippi	84	South Dakota	78
Dist. of Columbia	429	Missouri	137	Tennessee	124
Florida	170	Montana	107	Texas	122
Georgia	114	Nebraska	121	Utah	146
Hawaii	161	Nevada	117	Vermont	191
Idaho	98	New Hampshire	145	Virginia	132
Illinois	145	New Jersey	152	Washington	155
Indiana	107	New Mexico	120	West Virginia	111
Iowa	105	New York	245	Wisconsin	127
Kansas	121	North Carolina	115	Wyoming	100

EXHIBIT 6

Of the hospital's 170 physicians on the medical staff, thirteen are based at the hospital. The remainder have private solo or group practices at other locations on the Peninsula. The hospital has approximately 500 employees plus 325 regular active volunteers and some 70 student volunteers. It presently has a 172 bed capacity with a usual 86% [Booz] occupancy rate. The hospital boasts an X-ray department with a linear accelerator and a nuclear camera, a laboratory, six operating rooms, an emergency department with three emergency operating rooms and four treatment rooms, a pharmacy, a mental health center, a physical therapy department, two delivery rooms, two nurseries, a ten room intensive care unit with special facilities for five coronary patients, a diet kitchen and an outpatient recovery area.

The Monterey Hospital, Ltd. is an acute, for profit, general hospital, governed by a seven member board of directors elected by the shareholders. See Exhibit 8.

MONTEREY HOSPITAL LIMITED

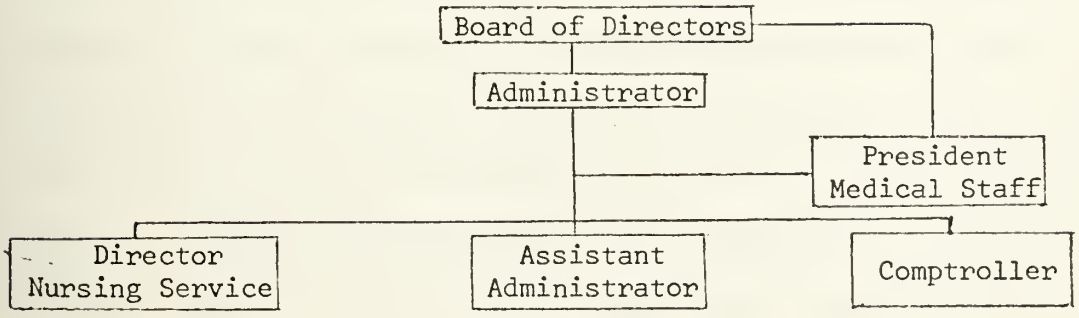


EXHIBIT 8

Under the Board of Directors, the hospital is managed by the administrator with the President of the Medical Staff who reports directly to the Board of Directors on medical matters. There are three full time physicians based at the hospital, plus the same physician staff as the Community Hospital. Virtually all the physicians on the Peninsula have privileges at both hospitals. The corporation hires some 180 employees to support its services which include medical and surgical care, coronary and intensive care, emergency room, diagnostic X-ray, a laboratory and a pharmacy. The hospital has an 86 bed capacity, but only has about a 51.2% [Booz] occupancy rate. (Recent articles in the Monterey Peninsula Herald indicate that negotiations are underway for the sale of the hospital to Eskaton, a Sacramento based health care organization.)

The Silas B. Hayes Memorial Hospital at Fort Ord is a military hospital providing much the same services as the other local acute general hospitals, but primarily for the military personnel in the area and their dependents, as well as for military retirees and their dependents. Not all dependents of military active duty personnel and retired military and their dependents use the Fort Ord Facility however. A substantial number avail themselves of the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS).

> Champus is a Congressionally funded program designed to provide families of uniformed service personnel and service retirees an alternative to medical care in the military and Public Health Service

facilities. Beneficiaries may receive a wide range of civilian health care services with a significant share of the cost paid for by the Federal Government. [California Blue Shield PR917 60M 1/73]

3. Convalescent and Skilled Nursing Care Facilities

There are nine nursing care facilities on the Peninsula providing convalescent and skilled nursing care. The nursing homes are listed in Exhibit 9 with their locations, the number of beds and the occupancy rates.

NAME	LOCATION	BEDS	OCCUPANCY
Monterey Convalescent	Monterey	53	75%
Skyline Convalescent	Monterey	99	86%
Driftwood	Monterey	77	90%
Ave Maria Convalescent Hospital	Monterey	30	100%
Beverly Manor	Carmel	99	100%
Carmel Convalescent Hospital	Carmel	65	90%
Hilborne Hacienda	Seaside	8	70%
Carmel Valley Manor	Carmel Valley	28	64%
Pacific Grove Convalescent	Pacific Grove	51	98%
Total beds		510	

EXHIBIT 9

Skyline and Driftwood receive only about 50% of their fees from Medicare and Medi-Cal. The others average about 80% from these sources. With the occupancy rates so high, a problem may exist in contracting for sufficient convalescent care beds. The Kaiser-Permanente group in its Northern California region has 2% of its beds designated as rehabilitation beds. A plan on the Monterey Peninsula could probably contract with whichever unit had an available bed on an individual basis as a need arises.

4. County Health Department

The Monterey County Health Department provides a wide range of services at their branch office in Monterey. These services include an Immunization Clinic, a Venereal Disease Clinic, a Child Health Nursing Clinic and a Problem Pregnancy Clinic. This branch office also provides a very comprehensive mental health program which includes the following:

Mental Health Clinic: crisis help, counselling, individual/group therapy, medication

Alcoholism Clinic: individual/group counselling, information and referral, medication, 24-hour help line

Drug Abuse Clinic: drug information and referral, counselling, Methadone maintenance treatment.

The county is in process, at this writing, of constructing a new health and welfare building in Seaside which is expected to provide much the same services as the Monterey Branch.

5. Other Sources

Closely related to the County's Mental Health Program are agencies such as Agape House in Seaside and the Monterey Peninsula Youth Project. These provide counselling services, crisis intervention and other like services.

In accordance with Public Law 89-749, California has been divided into 12 planning areas each with its own comprehensive health planning agency with the authority to develop and carry out their areawide comprehensive health plan. The Monterey Peninsula is covered by the Mid-Coast Health Care Planning

Association (MCHPA) which has all of Monterey County as well as San Benito and Santa Cruz Counties under its jurisdiction. In their "First Plan for Health", MCHPA determined that by the year 1979, the Monterey Peninsula would have a need for 17 more acute hospital beds and 18 more long term beds [Mid-Coast, Vol. II]. This indicates that there is not a critical need for more beds at the present time. MCHPA also indicates that according to the State Plan for Hospitals, and calculated on the basis of the December, 1973 population, the Monterey Peninsula is in need of two organized outpatient facilities. An outpatient facility is classified as organized when there is:

"a) specifically designated space assigned for use primarily for the diagnosis and treatment of ambulatory patients; and

b) which includes a reasonable scope and volume of services, including at least the following:

1) facilities for examination of patients by a physician or dentist;

2) clinical laboratory;

3) diagnostic X-ray; and in

c) which medical practitioners are members of an organized medical staff providing a community service on a regularly scheduled basis."

The provision of another County Health Department Branch as indicated above will partially meet the need for one of these outpatient facilities.

B. PROBLEMS IN THE PENINSULA'S EXISTING HEALTH CARE DELIVERY SYSTEM

1. Fragmentation of Services

A family often must go to several places for health care services. Because of complexities of bureaucratic organizations and financing, places of service may differ according to the patient's ages, the type of disorder, or the type of service needed. Remedial and rehabilitative services are often located in different agencies from acute services, and children must be taken to a separate clinic for immunizations. Essential services are frequently distant, and a whole day may be used in transportation and waiting and the intricacies of the system itself.

On the Monterey Peninsula, for instance, there are no physicians in Marina (see Exhibit 3) therefore for these residents to see a primary care physician they must travel an average of 6 miles to Seaside and for specialty care at least 10 miles to Monterey. As can be seen from Exhibit 3, most of the specialists are concentrated in Monterey and therefore solo practice physicians in outlying areas must send their referrals there. Also, most laboratory work has to be done at other than the physician's office. There is, as mentioned earlier, a County Health Clinic in Monterey and another under construction in Seaside. For greater understanding of this situation, see the maps in Appendix.

Another aspect of this problem is that of transportation from one city to another. There is bus service on a

fairly regular basis among them, but frequent transfers are necessary. Taxis are available but they are relatively expensive. Therefore, unless the patient or his family has a car, or has access to one, the problem is considerable.

DISTANCES FROM CITY CENTERS

Marina - Seaside	6
Marina - Cass Street, Monterey	10
Pacific Grove - " "	3.7
Carmel - " " "	4.7
Carmel Valley - " "	16
Seaside - " " "	4

EXHIBIT 10

2. Lack of Attention to Prevention and Outreach

Today in our society we have the knowledge and ability to prevent many non-infectious as well as infectious diseases through systems of health screening, dental programs, mental health programs and comprehensive family care, "Typically, private practitioners and health care institutions define as patients those who seek their services; they neither foster entry into the system nor reach out to assess the needs of broad population groups." [Daniels, p. 93]

Dr. O'Rourke strongly recommends an outreach program consisting of,

> Workers recruited from the community who know how the community works to help families to know about and use health services better by explaining what services are available, what the benefits are and assisting with

transportation, language or anything else which benefits the patient. [O'Rourke, p. ii, Appendix I, and personal interview on 27 January 1975, Sacramento]

The Booz, Allen and Hamilton Seaside study also recommended community outreach workers in the same pattern.

3. Impediments to Entry

Robert J. Daniels in writing about this problem states,

> Eligibility requirements are frequently unclear. When services are needed, the client's eligibility may be uncertain and the institution or professional offering the services cannot be sure of reimbursement. Lack of information about entering and using the system, embarrassing or punitive qualification procedures, and discriminatory attitudes are among the common obstacles. [Daniels, pp. 92,93]

In our research on the Monterey Peninsula we have not found uncertainty of eligibility of a patient who presents himself for treatment to be a significant problem, at least not from the standpoint of the provider. Interviews with physician receptionists have indicated that most patients that present themselves for treatment have positive identification for the particular health plan for which they qualify. If there is doubt, the appropriate agency is contacted. In no case would a patient in immediate need of care be turned away. However, we have no definite figures on how many potential patients fail to present themselves because they are ignorant of their eligibility for care. Alan Samuels implied in an interview that this figure might reach 4000 in Seaside alone. This number includes those who are above the poverty line but who just cannot afford regular insurance premiums.

4. Financial Considerations

In a health care plan using a fee-for-service model, where compensation is received after the service is delivered, the complexities of our bureaucratic system often delay payment. The red tape and late reimbursement can cause financial difficulties for the health care professional or institution and make planning ahead awkward. Interviews with those personnel concerned with billing procedures in selected representative Monterey health care facilities indicated a lag time of anywhere from four weeks to a year in collection time. It was interesting to note that those facilities utilizing computerized billing procedures reported a lower incidence of overdue bills with an average return of 30 to 90 days after bills were submitted. As an example of costs for this type of billing, Bank of America rates are as follows:

$75.00	per billing per month
.01	per account on file per month
.30	per statement printed
.35	per new account
.10	per additional new patient

added to this are postal fees plus the initial fee for converting an existing manual system. Other providers of this service charge comparable fees.

If the health facility maintains a manual system, it not only must hire someone to do the bookkeeping, but most provide office space for the bookkeeper and necessary files.

Those facilities involved with State and County programs indicated they required much more complicated procedures than the insurance plans. At best, any "after the fact" billing procedures clearly will require more manhours in clerical work than a prepaid system. Hester explained that prepayment would offer savings to the state and Federal governments by reducing the administrative load of individualized Medicaid and Medicare claims. This same advantage would seem to apply to the health plan.

5. Attitude of Recipients

Monterey County recently hired the firm of Booz, Allen and Hamilton, Incorporated, to survey and evaluate the medical service and facility needs of the City of Seaside. At a meeting held at the Seaside City Hall for the presentation of the report to the community, it was perceived by the authors that the citizens felt the study did not show the true needs of the community, that the people who are in greatest need were somehow left out of the survey. These perceptions may not have been factual, BUT THE MERE FACT THAT THEY WERE EXPRESSED INDICATES THAT THE CITIZENS ARE NOT SATISFIED WITH THEIR PRESENT SITUATION.

> Although recipients of health, welfare, and educational services, encouraged by the growing possibility of social changes, have become more demanding about their needs and desires and more able to express their feelings about shortcomings of the current system, many recipients continue to be depressed and discouraged about their present and future prospects. Such discouragement often fosters a discontinuous use of the system: The client gives up after episodic use of a service in a crisis and is "lost" until the next crisis. [Daniels, p. 93]

6. Lack of Availability of Services

This consists of several problems. One problem is related to a necessity for working people to take time off to go see their physicians for routine health care. Few physicians hold office hours beyond five or six o'clock. This forces people who work during the day to make difficult decisions among unsatisfactory alternatives. They may take time off from work, they may go to an emergency room in the evening or they may hope they get well without any professional treatment.

A study of emergency room services at Monterey Hospital, Ltd. indicates that 52% of the patients treated could have been treated in doctor's offices or by telephone consultation. They average about 325 patients per month. According to the head nurse these non-emergency visits are fairly evenly distributed around the clock. She estimated that approximately 2% of the patients had called their private physician and come in at his request, were met and treated by him. This would indicate that there are other reasons for the excessive use of the emergency room. Perhaps there is a certain "glamour" or excitement attached to having been treated there. There also are people who do not know who to contact or how to contact the system.

A similar study done at Community Hospital shows that only 15-20% of their emergency room treatments are true emergencies. They average between 1200 - 1400 visits per month. The head nurse estimated that 15-30% came in at the

request of their private physician and met him to be treated. The high rate of non-emergency visits was attributed partly to the transient and tourist populations.

The authors interviewed the Executive Director of the Mid-Coast Comprehensive Health Planning Association, Mr. Alan Samuels. When asked what were some of the ummet health care needs on the Peninsula, he replied that although third party payments, such as health care insurance plans, Medicaid and Medicare put health care services within the economic reach of more people than ever before, there are still members of the population who are not being reached. These can include those who do not qualify for Medicaid or Medicare but still cannot afford expensive health insurance programs. Also, that segment that either does not know they are eligible for care or does not know how to use the system. Mr. Samuels indicated a need for an outreach by community health workers to provide education, patient follow-up and day care programs.

7. High Cost of Health Care

As mentioned earlier, the typical fee-for-service structure of health care creates incentives for some doctors to provide unnecessary or questionable services, particularly when an insurance company will pay for some or all of the bill and simply pass on the costs in the form of higher premiums. At the expense of the taxpayer, health care services have been put within the economic reach of many of the

nation's poor through Medicaid and of our senior citizens through Medicare.

Claims for health care cost on the Peninsula are paid in accordance with the "usual", "customary" and "reasonable" (UCR) concept. The criteria used is the provider's individual charge as determined by a history of his past billings (usual). The area range of charges made by providers in the same community for the same services is called customary. To determine area range, California is divided into 28 geographic areas. The Monterey Peninsula is in area 12 which consists of Monterey, San Benito, and Santa Cruz Counties. A charge is deemed to be reasonable based on judgement by local peer review considering all of the medical facts and circumstances.

According to the California Blue Shield's Professional Relations Office, the UCRs are also categorized into two profiles; Medicare, Standard and CHAMPUS comprise one profile whose rates are based on 1973 charges and whose payments amount to 80% of the allowable UCR amount. Medi-Cal is the other profile and pays 100% of the allowable UCR amount but bases the UCR on 1968 charges.

TWO PROFILES IN USE BY BLUE SHIELD

	1 Medicare Standard Effective CHAMPUS 1 July 1974	2 Medi-Cal Effective July 1970
Individual Physician's profile Level I	Jan - Dec 1973	July-Dec 1968
Billed Coefficient	Jan - Dec 1973	
Area Profile Level II	Established physicians 75th percentile (Weighted by Services) New physicians 50th percentile (Weighted by Services)	60th percentile
Broad Band Level III	75th percentile Jan - Dec 1973	60th percentile

Blue Shield also uses three levels in determining UCR amounts [Beauchamp].

Level I

The Level I profile is the amount which best represents the actual charges which were made for a given service by a provider to Blue Shield during a data base period.

In developing the Level I, each charge the provider made for the service is used. This data is collected and stored as claims are processed in each program. The charges are arrayed in ascending order and the lowest actual charge which is high enough to include the median of range of charge data is selected as the Level I.

How to Develop a Level I

Array the charges for each provider - each procedure from lowest to highest:

Procedure 90040 Charge	Number of Services	
$5.00	30	
6.00	40	----- MEDIAN
7.00	35	
	105	charges

The median is that charge above and below which one-half of the charges fall. In this example, the median would fall at the 53rd item, which is a charge of $6.00. The Level I is $6.00.

What is a Level I Billed Coefficient
There are approximately 3600 procedure numbers in the 1969 California Relative Value Study. The CRVS was developed as a method of identifying the values of each procedure or service provided; the CRVS is composed of different sections such as medicine, surgery, radiology, pathology and anesthesiology. Not all providers during a data base period bill for each procedure in the CRVS.

An equitable way to reimburse providers in the absence of a Level I, is to employ the Level I Billed-Coefficient concept. This coefficient is an average per unit for each type of service. To arrive at a fee, the relative value unit is multiplied by the billed coefficient which is a dollar amount. The lesser of the billed amount, Level I coefficient times the 1969 CRVS of Level II is determined for payment.

How to Develop a Level I Billed Coefficient

Doctor A

Procedure	Level I	1969 RVU	Coefficient	Number of Services	Weights of Coefficients
90000	$15.00	20.0	.75	6	$ 4.50
90020	35.00	70.0	.50	10	5.00
90040	8.00	12.0	.67	100	67.00
90050	10.00	16.0	.62	4	2.48
90140	10.00	20.0	.50	20	10.00
				140	$88.98

Level I Billed Coefficient =

$$\frac{\text{Total of Weighted Coefficients}}{\text{Total Number of Services}} = \frac{88.98}{140} = \$.64$$

This provider's Level I Billed Coefficient or average per medicine unit is equal to $.64.

Level II

Level II is the upper limit of payment unless unusual circumstances are present in a particular case.
The Level II profile is calculated at the 75th percentile of weighted Level I's. In the calculation, each Level I is weighted by how often the provider rendered the service.

A Level II at the 50th percentile is also developed for use in the "new physician" concept. Such physicians include (1) physicians beginning their first practice who do not have three months of charge data during the base period and (2) established physicians who begin practice in a new locality.
These 50th percentile Level II amounts are used to establish Level I and Level II coefficient values which are input values for the new provider concept.

How to Develop a Level II

Level I	Number of Services Rendered by provider		Cumulative Services	Cumulative Percentage
$5.00	1402	28	1402	28
6.00	1115	22	2517	50
7.00	1680	34	4197	84
8.00	803	16	5000	100
	5000			

Since Level II is defined as the 75th percentile, the profile will be that charge at or below which 75 percent of all charges fall. In the above example, $7.00 is the Level II.

Level III

Level III is an average per unit charge by each section of the 1969 CRVS for each specific locality. Level III's are calculated by taking each Level II profile for a locality and 1969 CRVS section and dividing the Level II amount by the appropriate 1969 CRVS units. Level III's are developed similar to the Level I Billed Coefficient methodology.

How To Compute A Level III (Broad Band Coefficient)

Area 2 - Medicine

	(1)	(2)	(3)	(4)	(5)
Procedure #	Level II	1969 CRVS	Coefficient	Number of Services	Weighted Coefficient
90250	$15.00	20.0	.75	6	4.50
90020	35.00	70.0	.50	10	5.00
90340	8.00	12.0	.67	100	67.00
90550	10.00	16.0	.62	4	2.48
90440	12.00	20.0	.60	20	12.00
				140	$90.98

$$\text{Broad Band Coefficient} = \frac{\text{Total of Weighted Coeff.}}{\text{Number of Services}} = \frac{90.98}{140} = \$.64$$

[Blue Shield]

A cost that is often not considered is the pateint's time when he has to take off from work. Usually, when surgery is scheduled, arrangements are made for a replacement on the job. Frequently, the surgery is cancelled or postponed, and that employee cannot go back to work because someone else has been hired to take his place for a specified period. [Gould]

Another cost that is receiving some attention is that of travel to a health care facility. "Distance is a potentially important 'price' variable because there are costs of time and direct costs of travel associated with it. Travel may present particular problems for the old, the disabled and persons with small children." [Leveson, p. 12] These were discussed more thoroughly under "Fragmentation of Service."

IV. FEASIBILITY OF AN HMO ON THE MONTEREY PENINSULA

The feasibility will be evaluated from two viewpoints. First we will discuss the possible enrollment population and then propose model plans to meet the needs of the Peninsula.

A. POSSIBLE ENROLLMENT POPULATION

In order to evaluate possible enrollment, it is necessary to first look at the total population from which subscribers might be drawn.

The population of the Monterey Peninsula, according to a 1973 census is 126,000. This total includes a number of active duty military personnel and their dependents as well as 3,836 military retirees and their dependents who are all eligible for care at military health care facilities. However, an article in the March 12, 1975 issue of Navy Times, reporting on the testimony of the Secretary of Defense before Congress, said that the Department of Defense, "is now 'taking a hard look' at the trade-off between CHAMPUS and in-house health care 'to determine the most efficient mix'". They also reported the Secretary as saying that DOD is examining and testing new initiatives such as contracting with HMOs to provide medical care for military personnel at certain installations. An earlier article in the September 25, 1974 issue of Navy Times reported,

> [A] position paper prepared for the upcoming convention of the association of the United States Army says that opponents to the present military health care system

"would like to alter significantly the mission of the military medical care system to include major reductions in medical active duty strengths and the transfer of dependent and retiree care to an HEW controlled national health plan."

There is no doubt that a percentage of retirees and dependents presently obtain health care from civilian sources through the CHAMPUS program, but if all of them were forced to seek care from civilian sources the Peninsula's health care resources would be hard pressed to meet that need. The extent of this impact is shown in Exhibit 11, which gives the monthly totals of treatments of these groups at the military medical facilities on the Peninsula.

	Fort Ord		DLI*	NPS**	
	Inpatient	Outpatient	Outpatient	Outpatient	Total
Dependents on Active Duty and Retired	275	16,185	11	1,455	17,926
Retired	69	3,195	28	115	3,407
Total	344	19,380	39	1,570	21,333

*Defense Language Institute Dispensary
**Naval Postgraduate School Dispensary

EXHIBIT 11

The treatments at Silas B. Hayes Army Hospital amount to approximately half of their work load. However, Mr. Jack Rees, Patient Liaison Officer at the hospital, suggests that if the non-active duty military work load were substantially reduced and thus the waiting time for general sick-call reduced, the

active duty military work load would increase significantly because of those who are staying away now due to the waiting time element.

Mr. Rees indicated that the civilian medical community as it exists today could not handle the impact. He related a recent experience when the Hospital's OB-GYN staff was reduced to one physician and all dependents were referred to civilians under the CHAMPUS programs. Within two weeks a representative of the County Medical Society was at the hospital complaining that the community could not absorb the extra load.

Other sources for recruiting subscribers are the local labor unions. Section 1310 of PL 93-222, as described earlier outlines the dual choice option for HMOs if one is in the area. Labor unions may be an excellent source since if one can sell the HMO plan to the union leaders you recruit all the laborers they represent in the area. A problem in some cases is that the local unions or companies are affiliated with a much larger organization that contracts with an indemnity company covering several counties or a whole state. Such is the case with the building trades unions, the Pacific Gas and Electric Company and the Pacific Telephone Company. However, if the HMO plan is proven more economical and provides a more satisfactory service, we believe even those employees can be recruited. That is, if it can be shown that the services provided by the existing union plan can be provided at a lower cost by the HMO plan or that more services

can be provided at the same cost, obviously the unions would want to avail themselves of the HMO plan. The unions include approximately 4,875 members. Pacific Gas and Electric Company has 181 employees on the Peninsula, all covered by Blue Cross. The Pacific Telephone Company has approximately 420 employees also covered by Blue Cross. The Monterey Culinary Insurance Fund, covering the Hotel, Restaurant and Bartenders Union employees has indicated a strong interest in an HMO plan if one were established. They represent 2,686 employees on the Peninsula, plus some 300 retired members for which they provide a major medical care supplemental plan which takes care of costs not covered by Medicare.

Exhibit 12 shows the major unions on the Peninsula, their memberships, the carriers currently providing health care and the cost per member per month. The notation "self insured" refers to a fund to which the employers and/or unions contribute and from which claims are paid at times of illness. As can be seen, the costs vary widely and no attempt was made at this point to differentiate the comprehensiveness of the different coverages.

Exhibit 13 gives approximately the same information regarding government employees. The employees listed for Federal government agencies are all civil service except the Post Office. Another group of people employed on Federal reservations are those that work in the military commissaries, exchanges and clubs. These people are paid from non-appropriated funds, are not civil service, and were not

ENROLLMENT POTENTIAL ON THE MONTEREY PENINSULA

A. Unions and their Health Plans

UNION	MEMBERSHIP	HEALTH PLAN CARRIER(S)	COST PER MEMBER PER MONTH
Bricklayers, Masons and Tilesetters	not available	Union Labor Life Insurance California Dental Service California Vision Service	$88.00
Carpenters	550	Blue Cross	51.00
Plasterers, Cement Masons	50	Self-insured	not available
Electrical	100	Blue Shield	52.00
Plumbers and Steamfitters	125	Republic National	80.00
Teamsters	200	Teamsters Fund	66.00
Retail Clerks	400	Self-insured	73.00
Sheet Metal Workers	50	Self-insured	60.00
Laborers' International	250	Self-insured	45.00
Roofers	50	Blue Cross/Blue Shield	59.00
Painters	100	Self-insured	40.00
Hotel and Restaurant Employees and Bartenders	3000	Self-insured	31.54
TOTAL	4875		

EXHIBIT 12

B. Governmental Employees and their Health Plans

EMPLOYER	NUMBER EMPLOYEES	HEALTH PLAN CARRIER(S)
Naval Postgraduate School	835	Blue Cross, Etna
Fort Ord	3000	"
Defense Language Institute	711	"
U.S. Commerce Department	14	"
Social Security Administration	12	"
U.S. Department of Transportation	35	"
U.S. Courts and Magistrates	4	"
Post Office Department		
Carmel	28	Blue Cross, Post Office Union
Carmel Valley	13	"
Marina	16	"
Monterey	110	"
Pacific Grove	33	"
Pebble Beach	11	"
Seaside	33	"
State of California	127	Choice of several plans
Monterey County	300	"
Cities		
Monterey	274	Plan is up for bids each year
Carmel	78	City pays all expenses after $50 deductible
Pacific Grove	117	New York Life - includes dental care
Seaside	130	California Western
Public Schools		
Carmel Unified	175	Blue Cross
Pacific Grove Unified	300	Blue Cross, Blue Shield
Monterey Unified	1602	Blue Cross
Monterey Peninsula College	584	Same as for State of California
TOTAL	8542	

EXHIBIT 13

included because about 80% of them are military retirees or dependents. There are about 900 of the NAF employees on the Peninsula. The only one of the listed groups which indicated any interest in an HMO was the City of Monterey since their coverage is up for bids each year. The member costs were not included here because they were so similar to those for the unions.

There are also a number of private schools in the area but they only employ 167 people and expressed no active interest in an HMO at this time.

The Chamber of Commerce in Pacific Grove expressed some interest in acting as an intermediary with an HMO to provide coverage for small businessmen and their employees. For instance in Pacific Grove there is only one business, Holman's Department Store, which employs more than 25 people, but there are many small businesses. Unless their employees are covered through the unions, they may be responsible for their own health care insurance, and at a significantly increased rate. Monterey is probably the only city on the Peninsula that has any significant number of employers of more than 25 people, so the various Chambers of Commerce might be a good enrollment possibility. A factor that would require consideration would be to determine the number of those small businessmen who are military retirees, as that might have a significant impact.

B. POSSIBLE STRUCTURES OF THE PENINSULA HMO

With the information thus far presented, we feel we can now construct alternative models of the HMO that could be implemented on the Peninsula. There are a number of plans that could be studied to determine which would be best suited for achieving the objectives of any HMO. We will consider three specific plans tailored to the needs of the Monterey Peninsula. All three will be non-hospital based plans because we feel that Community Hospital with an 86% occupancy rate would not be interested and Monterey Hospital, Ltd. is in an uncertain position considering the current sale negotiations. In all cases we will incorporate the four basic divisions but will allow for flexibility in their organization.

Clearly, before implementing any innovative health care delivery system, one must be assured of the availability of the four basic elements; providers, administration, hospital beds and consumers. The County Medical Society is a potential point of contact for recruiting local physicians. Although there has been some opposition by physicians in other communities in the past, the Monterey County Medical Society is presently investigating the possibility of establishing an individual practice model HMO covering Santa Cruz and Monterey Counties.

The Monterey Bay Area Foundation for Medical Care would be the administrative branch of a Peninsula individual practice HMO. Administrative options for the other HMOs

could be organized through unions, consumer co-ops or private corporations.

Hospital beds could be contracted for at either or both of the two private hospitals in the area.

Last but not least, a minimum initial consumer enrollment with adequate potential growth to reach 20,000 in three years is desired. Potential sources for these enrollees are shown in Exhibits 12 and 13, earlier in the thesis.

In the process of planning the organizational and physical structure of an HMO, there are several options to consider.

1. While it is not necessary, it is desirable to have all of the four basic divisions of the HMO in close physical proximity.

2. It is important to have the records kept in the same place as the primary care center.

3. The inpatient acute and convalescent beds do not have to be at the primary center location but should be within a reasonable distance.

4. The marketing arm and administrative services can be physically located almost anywhere.

In our analysis we will be looking at an ideal model as a guide, knowing full well that it would not be economically feasible. We will list goals and objectives for a Peninsula HMO and then propose possible strategies for their accomplishment. An ideal health care delivery system is one that would provide quality care -- preventive, acute and followup --

to all of society in an equitable and efficient manner from the cradle to the grave.

We feel confident that no one would disagree with this statement. However, there are several interpretations of the terms "quality care", "equitable" and "efficient". For the purposes of this paper we will define quality care as patient oriented, medically necessary procedures of acceptable medical standards as set by a professional standards review organization. What is meant by equitable may be more difficult to explain. There is a growing movement in this country toward guaranteeing health care as a right. Would it therefore be equitable to provide health care to all at no direct out-of-pocket cost? It is being done in England. Is such a system fair to the physician? Can "quality" care be provided in such a system? Again, for the purposes of our paper and to avoid a long dissertation on the economics of social medicine, we will define "providing in an equitable manner" as being within the economic reach of all members of our society, that is, no one will be denied care because of inability to pay. "Efficiency" here refers to providing any given amount of care at the least possible cost.

1. Goals and Objectives

In order to provide an ideal health care delivery system on the Monterey Peninsula, we propose using an HMO as previously discussed. Our goals for the HMO then are:

1. To provide high quality health care to the enrollees around the clock, seven days a week.

2. To provide accessibility to the plan to all social and economic levels through a variety of prepayment options, and geographic availability by having a central location.

3. To increase public awareness of the availability and importance of preventive care through education and outreach.

4. To provide a stimulating, challenging and pleasant working environment for the professional staff.

5. To provide for a stable organization and to minimize staff turnover.

6. To develop within a three year period an enrollment level which permits financial viability, since federal funds would not extend beyond that point according to PL 93-222, Section 1305.

The objectives developed to meet these goals are as follows:

For Goal 1, To:

a. Establish a family-oriented group medical practice with expanded roles for para-medical personnel.

b. Establish within the organization a peer review system for quality assurance of both professional and supporting staff activities.

c. Establish a governing board composed of representatives from the different interested sections of the community, i.e., consumers, providers, labor unions, government, etc.

d. Provide for a continuing training and education program for members of the staff, described later.

e. Medical specialists on the staff or used in referrals shall be board certified or eligible.

f. Provide on the staff or through contract all necessary medical specialties and supporting services.

g. Establish a system of consumer grievance adjudication.

For Goal 2, To:

a. Include as eligible for enrollment, recipients of Medicare and Medi-Cal, up to 30% of total enrollment.

b. Through government subsidies provide a basic health plan for health care indigents (those not eligible for Medicare or Medi-Cal and unable to afford regular premiums).

c. Offer a variety of comprehensive health care programs to meet the needs of the community.

d. Assess the area or areas of enrollees concentration and provide primary health care centers and/or auxiliary clinics accordingly so that the primary care is available within ten miles of at least 90% of the enrollees.

For Goal 3, To

a. Recruit workers from the community to go out into the community to help residents identify health care needs, explain what health services are available and how to use them; assist with transportation problems, language barriers and any other problems that might hinder a citizen from obtaining health care.

b. Maintain liaison with the County Health Department on health education and outreach services.

For Goal 4, To:

a. Provide time for inservice and outservice education. For physicians, 1 medical conference per year, for nurses, 1 outservice per year and weekly inservice programs.

b. Provide time for staff conferences. A minimum of one hour bi-monthly is the usual time allotted.

c. Encourage and coordinate research efforts.

d. Provide adequate ancillary staff so that professional staff are not involved in non-professional tasks.

e. Involve representation from professional staff in the planning of the physical plant facility.

f. Assure the size of the professional and ancillary staff are commensurate with the current enrollment.

g. Provide flexible problem-solving mechanisms between professional staff and administrative services and among the professional staff members.

h. Compensation and fringe benefits to be competitive in the area.

i. Authority and control functions to be retained within each professional group. In other words, doctors would be responsible for the actions of other doctors, nurses for nurses, etc.

j. Adopt a provider-patient agreement on binding arbitration of malpractice disputes permitting the use of experts in the field of controversy to present arguments.

This would substantially reduce malpractice insurance premiums for an HMO or its member physicians and yet provide for just compensation of a plaintiff in a case of actual medical malpractice.

For Goal 5, To:

a. Recruit as many staff personnel as possible from the present population of the Peninsula since they would already be settled in the area and would not be as apt to want to relocate.

b. Set wage scales to be competitive in the local labor market.

c. Set fringe benefits to be competitive in the local labor market.

d. Devise an organizational plan allowing for both vertical and horizontal promotion or advancement of personnel within the system.

For Goal 6, To:

a. Recruit a total of 20,000 subscribers within three years, with an initial enrollment of 3,000 growing at an average rate of 500 per month.

b. Premiums must be competitive with other health plans in the area and adequate to cover expenses over and above government subsidies once the 20,000 enrollment is reached.

2. Strategies

In this section we will describe three organizational strategies for meeting the goals and objectives previously

listed. The elements of our HMO will follow the guidelines of Dr. Paul O'Rourke's Richmond Model Cities study with some modification.

1. A primary care center capable of providing the majority of the health care needs of the enrollees. This center would provide such ambulatory services as screening, prevention, diagnosis and treatment of medical, surgical and dental disease, and primary mental health. This would include recovery beds for outpatient surgical procedures. The administrator of Surgi-Center in Phoenix, Arizona stated in a telephone interview that 40% of all surgical procedures could be done on an outpatient basis [Freeman].

2. By contract, an adequate number of currently available hospital beds to accomodate the expected needs of the HMO's ultimate enrollment.

3. By contract, long term medical rehabilitation and extended care beds.

4. By contract, nursing home care.

5. By contract, specialty referrals for services not covered by HMO staff.

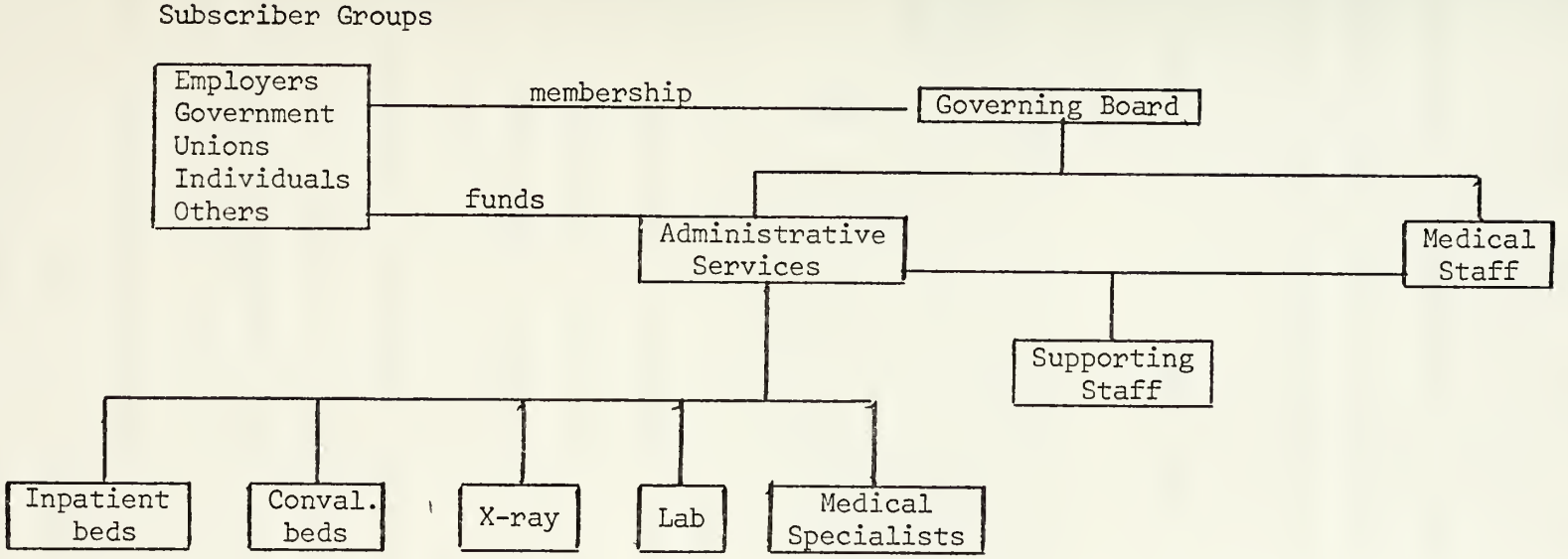
6. Provision of a home care program.

7. Outreach clinics in outlying areas manned by specially trained paramedical personnel with telephone communication for physician referral.

a. HMO Using Federal Government Facilities

Strategy number one involves the use of idled Federal Government facilities or those that are not fully

ORGANIZATIONAL CHART - FORT ORD - MONTEREY



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utilized at the Silas B. Hayes Memorial Hospital at Fort Ord. These facilities could not be used to the detriment of their primary mission which is the care of active duty personnel. The use of Federal plant facilities by civilian communities is not exactly unheard of or without precedent. The Martinez Health Center in Martinez, California has contracted with the Veterans Administration Hospital in Martinez to share certain facilities such as laboratories under Article 5051, Title 38, U.S. Code. Also Article 2667, Title 10, U.S. Code states,

> Whenever the secretary of a military department considers it advantageous to the United States, he may lease to such a lessee and upon such terms as he considers will promote the national defense or be in the public interest, real or personal property that is
> (1) under the control of that department;
> (2) not for the time needed for public use; and
> (3) not excess property, as defined by Section 472 of Title 40.

If the Department of Defense should transfer dependent and retiree care to the civilian sector, this will amount to 20,989 outpatient visits and 344 inpatient admissions per month, clearly there would result idle plant property at the Fort Ord Hospital that could be leased for use by the HMO for convalescent and acute inpatient care. As previously stated, this amounts to approximately a 50% reduction [Rees]. A recent study completed for the Navy by Boeing Computer Services indicates that such a transfer would result in a 75% reduction in outpatient visits and a 40% reduction in total operating beds. [Boeing, Findings and Implications section] It is not inconceivable that this lease could even be

extended to the Hospital's outpatient facilities, but we will leave that possibility for others to consider. This hospital would not necessarily be the most advantageous location for the primary care center. A suitable building should be located in Monterey somewhere near Cass or Pacific Streets to house administrative services and a primary care center. This would be the entry point into the HMO. As indicated earlier, suitable buildings housing administrative services, primary care center and possibly auxiliary clinics should be located to facilitate access. If further research shows that the enrollee population is widely scattered over the whole Peninsula without any significant areas of concentration, it might be advisable to locate the health center in Monterey, in the Cass and Pacific Street area. Here it would be centrally located and in proximity to a high density of medical specialists as well as the Monterey Hospital. Such a center could also be the nucleus for auxiliary clinics located at strategic areas less accessible to the main center. These clinics could be manned by paramedicals who could easily communicate with the main center when necessary. The possibility of a mobile clinic should receive serious consideration. If areas of heavy enrollee concentration appear in another area or in more than one area, then perhaps the primary care center should be located in the area of strongest concentration or consideration should be given to establishing two centers. Care should be taken however, not to decentralize to the point of losing the advantages of economies of scale,

particularly with respect to fragmentation of services. This organization would meet the goals and objectives as follows:

A basic medical staff would be organized from individual primary care physicians. Initially, this would include full time; three Family Practice physicians, one Internal Medicine physician, one Pediatrician, one OB-GYN physician and one General Surgeon to care for the initial 3000 enrollees. This would be equivalent to 10,500 persons eligible for care, using a factor of 2.5 dependents for each subscriber. This basic staff would be augmented as the enrollment increased. Referrals to medical specialists not on the staff could be handled either through fee-for-service or through a contractual agreement for a given amount of time. A system of reviewing physician practices should be established on a bi-monthly basis by the physicians within the organization.

Administrative services would be responsible to provide fiscal and supply, marketing, contractual services, housekeeping services, personnel administration, patient records and social service.

The supporting staff would include the physician extenders and nursing service personnel.

In order to be more responsive to the needs of the consumers, at least 30% of the membership of the governing board should be from the subscriber groups. The rest to come from interested groups such as the labor unions, municipal government and the medical community. The governing board would

be responsible for annual review of goals and objectives. There are some disadvantages to starting with this type of HMO.

1. As mentioned earlier, the patient is limited in his choice of physicians to those who are on the staff of the primary care center.

2. The physicians may feel a rather loose attachment to the organization and to the patients because of the "clinic" type atmosphere.

3. There is a large initial outlay of capital for staff, equipment, building, etc.

4. Utilizing Federal facilities adds unique problems to this alternative.

a. Liability - if one of the subscribers is at Fort Ord and is injured either at the hospital or on the base on the way to the hospital, who is liable?

b. Jurisdiction - since the Federal government is not subject to state regulation, under whose jurisdiction would the HMO staff come while on Federal property for licensing, etc.?

c. In event of a national emergency, the HMO may face possible eviction on short notice.

d. There is always the possibility of friction between military and civilian personnel working in close proximity.

e. Some accomodation would have to be made to allow subscribers to enter and leave the military reservation.

f. The civilian system of health care delivery would be incompatible with the military because the military provides so many more extras, for example, as many as 5 X-rays for a fracture, highly sophisticated lab work-ups and a much more advanced use of physician extenders than the civilian community is ready to accept. [Rees]

b. HMO Not Using Federal Government Facilities

The basic difference between this plan and the preceding strategy is that in this instance, contracts for inpatient beds would be with the Monterey Hospital, Ltd. instead of the Fort Ord facility. It is centrally located and within easy access of an HMO located anywhere in Monterey. The hospital has an average occupancy rate of 51.2%, therefore, contracting for some of their beds should present no problems. We must keep in mind however, the possibility of the sale of the hospital to another health care organization and the impact of that move on the use of present facilities.

According to the Mid-Coast Comprehensive Health Planning Association there is no need for additional acute or convalescent care hospital beds on the Peninsula. Therefore our HMO plan will of necessity be using existing beds for these types of care. This can be done by contracting with current providers of beds.

The organizational structure is the same as for the model where Federal Government facilities were used.

The disadvantages of using Federal Government facilities are not present in this plan. This plan allows for the location of the care center in the most accessible location for the enrollees. It provides for centralization of patient records and facilitates continuity of care and comprehensive family-oriented care. There would be no conflict of interest between care of enrollees and private practice care as in the following strategy since the primary care physicians would only be providing care for the enrollees. Centralization would provide the advantages of economies of scale.

c. Individual Practice Model

In this plan the Monterey Bay Area Foundation for Medical Care will act as the health services plan contracting with the various subscribers, "a foundation is an organization of physicians, sponsored by a local or state medical society, that usually contracts with industry, unions, or government to provide comprehensive care for specified patient groups." [Eisenberg, p. 2] Medical services will actually be provided by a corporation formed by individual physicians and medical groups on the Monterey Peninsula. All physicians belonging to the Monterey County Medical Society will be eligible for participation in the corporation. The member physicians will have the right to carry on their independent private practices. The corporation would become involved only when the patient is covered by a foundation contract.

ORGANIZATIONAL CHART - INDIVIDUAL PRACTICE MODEL

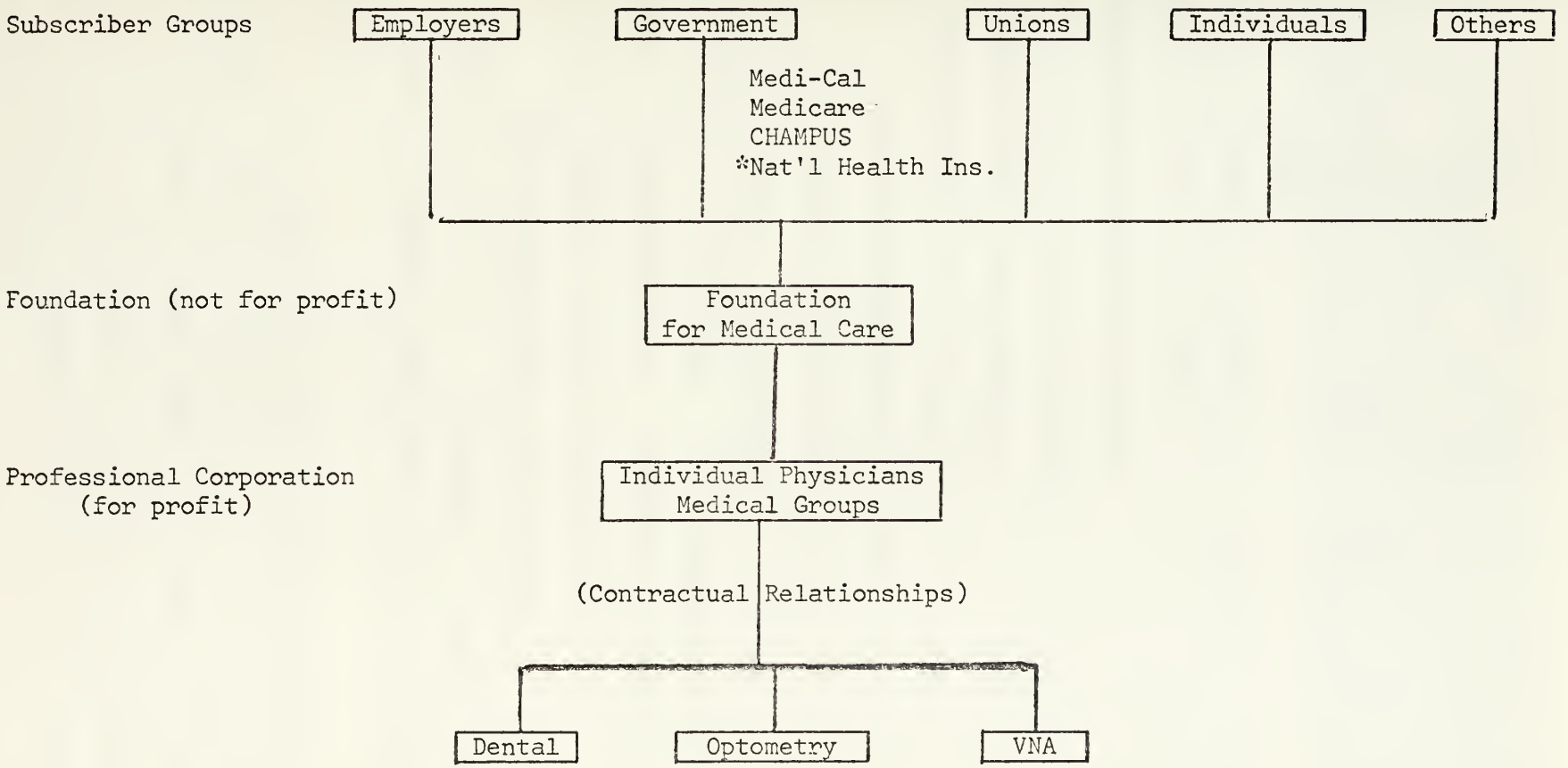

EXHIBIT 15

> Subscriber groups identified as union, employees, governmental, individuals and others will be approached by the Foundation. In exchange for a prepaid capitation payment, the subscriber receives surety of care. Depending upon arrangements formulated with the foundation, the corporation will either receive a lump sum capitation rate for the area, or the physicians will be paid a modified fee-for-service by the foundation or corporation. [MCMS]

If for one reason or another the corporation depletes the capitation amount contracted for with the foundation for its area before the end of the contract period it is still liable for the provision of necessary health care to covered subscribers during the remainder of the contract period. This would discourage unnecessary hospitalization or treatments.

In this organization, there is no primary care center, there are no full-time physicians solely for the use of the subscribers. The consumer has freedom of choice among the participating physicians. The County Medical Society is in process of establishing a professional standards review organization (PSRO) to assure quality of care.

The consumer pays the Foundation a predetermined amount fixed by contract. The doctor is paid by the foundation, either a lump-sum capitation rate or a modified fee-for-service.

The Foundation provides administrative services which include financial and marketing, and contractual services. Provision has been made for a Board of Trustees although it does not appear on the organizational chart and planning is presently underway to provide for consumer membership on the Board.

One of the major advantages to this type of organization is that there would be no large capital outlay to establish the program because the Foundation is already there and the doctors use their present offices. Foundation physicians are all members of the local hospital staffs and can make individual arrangements with the hospitals for admitting patients. However, as a corporation there is the option of contracting with the hospital for the use of a predetermined number of beds per month for a negotiated fee thus reducing hospitalization costs.

There are some disadvantages to the system. There would be no primary care center thereby perpetuating fragmentation of services, decentralization of records and loss of economies of scale. There also may be an incentive for physicians who combine private practice with prepaid contracts to give something less than optimal care to the contract patients.

C. OVERCOMING RESISTANCE

Bennis, et al, have recommended twelve general principles concerning resistance to change which should be considered when planning for an innovative change.

"1. Resistance will be less if administrators, teachers, board members and community leaders feel that the project is their own -- not one devised and operated by outsiders." [p. 496] For example, leaders from unions, teacher's organizations and civic groups should be included

in final planning. These are the groups from which would be drawn the subscribers to the HMO and therefore would be involved in helping to shape the organization to meet their needs.

"2. Resistance will be less if the project has wholehearted support from top officials of the system." [Ibid.] In defining the medical care system as it now exists, these leaders would be those of the medical society and perhaps the local hospital administrators.

"3. Resistance will be less if participants see the change as reducing rather than increasing their present burdens." [Ibid.] It would be necessary to emphasize that the change will improve accessibility to the health care system. Hopefully better service will be offered for the same or less money.

"4. Resistance will be less if the project accords with values and ideals which have long been acknowledged by participants." [Ibid.] Health is a basic value which most people hold in high esteem. Through emphasis on preventive and maintenance care, health of the enrollees should be improved. By offering free choice of physicians among those on the HMO staff and making provision for changes in the event of dissatisfaction on the part of either patient or doctor, the desire for individualized care can be partly met.

"5. Resistance will be less if the program offers the kind of <u>new</u> experience which interests participants." [p. 497] The community must be educated to the differences between the

HMO concept and the fee-for-service indemnity insurance type health care program. They must be convinced of the value of the preventive aspects of HMO medicine through education and outreach.

"6. Resistance will be less if participants feel that their autonomy and their security is not threatened." [Ibid.] Presenting the HMO as one of several choices of care retains the consumers autonomy and he is secure in his ability to opt out if he is not satisfied.

"7. Resistance will be less if participants have joined in diagnostic efforts leading them to agree on what the basic problem is and to feel its importance." [Ibid.] In our investigations we have discovered that dissatisfaction already exists regarding the health care delivery system on the Peninsula, and an initial three alternatives are presented here for their consideration. Before a decision is made regarding the structure of the delivery system, representatives of a wide range of groups from all of the areas should be brought into the planning sessions.

"8. Resistance will be less if the project is adopted by consensual group decision." [Ibid.] We would recruit and train local members of the community to make presentations to civic and women's organizations, unions, etc. to facilitate group consensus. Care must be exercised to present a realistic picture of the plan and not promote false expectations.

"9. Resistance will be reduced if proponents are able to empathize with opponents; to recognize valid objections and

to take steps to relieve unnecessary fears." [Ibid.] Some of the fears related to use of HMO type care are impersonalization of care which can be counteracted, and lack of choice of physician which is only partial since they have a choice among the physicians in the group and can change if they so desire. Opponents to the plan should be invited to participate in the initial planning so that their objections can be dealt with.

"10. Resistance will be reduced if it is recognized that innovations are likely to be misunderstood and misinterpreted, and if provision is made for feedback of perceptions of the project and for further clarification as needed." [p. 497] Establishment of an information center would provide speakers for organizations as well as information as requested by individuals.

"11. Resistance will be reduced if participants experience acceptance, support, trust, and confidence in their relations with one another." [Ibid.] This principle points up the need to establish and maintain open channels of communication among the participants.

"12. Resistance will be reduced if the project is kept open to revision and reconsideration if experience indicates that changes would be desirable." [Ibid.] Annual review of goals and objectives by the Governing Board would satisfy this principle. As discussed previously, 30% of the membership of the Governing Board would come from the subscriber group.

In the final analysis, acceptance by the consumer and the community as a whole will depend on all persons involved in the HMO. The ancillary personnel as well as the physicians must strive for patient-oriented health care and consumer satisfaction. Such satisfaction will result in word-of-mouth advertising throughout the community thus helping to sustain steady growth.

V. CONCLUSIONS

It should be obvious by now that a health care delivery system is very complex and it is not feasible to define any one problem or issue, the solving of which would result in the "ideal" system. The health care delivery system in this country is one of the best in the world. As pointed out in our introduction, Campbell in her book "Economics of Health and Public Policy", indicates that health care is a substantial part of our country's gross national product. This brings to mind the motto of the Ninth Naval District's Dental Reserve Program in 1965; "We are the biggest and the best, our only problem is how to get better."

In this thesis we have attempted to accomodate solutions to several of the problems found to exist on the Monterey Peninsula by proposing alternative HMO models which the authors believe to be a way of solving these problems and to make an already good system better.

We described what an HMO is and dwelled a moment on its evolution to show that it is not a new, completely untried idea, but that it is a substantially proven plan that has only recently gained national attention because of Government backing. We listed a number of principles we felt largely responsible for the success of HMO plans: provider responsibility, prepayment, physician autonomy, utilization incentive, dual choice, and comprehensive coverage. A description

followed of the basic organizational structures of HMOs. Advantages of HMO care over non-HMO care were discussed in considerable detail: (1) reduced Hospitalization and surgery thus reducing costs, (2) increased preventive care, resulting in early detection of illnesses that would require more sophisticated care over a longer period of time or actually preventing illness, (3) economies of scale by reducing fragmentation of services as well as costs by sharing common equipment and supply sources, (4) quality assurance through use of more board-certified or board-eligible medical specialists, and the use of professional review. We also pointed out some of the disadvantages of the HMO. The disadvantages were found to be: (1) possible incentive for physicians to give less than optimum care, and (2) restriction of the patients choice of physician. Either through the authors' biases or just through lack of available literature on disadvantages, the scale seems to be heavily tipped on the side of the advantages. The authors did attempt to present a fair and honest picture according to the resources available to them.

Since the U.S. Government has passed legislation which impacts on HMOs we felt obligated to at least summarize these laws, e.g. the HMO law and the PSRO law. Again, since we are talking about a California community we felt it necessary to describe the State Prepaid Health Plan law.

Before applying the principles of HMOs to the Peninsula we had to investigate the existing health care delivery

system. When viewed as a general overall picture the figures do not show that there exist any significant deficiencies in the health care system. Upon closer examination however, some problems do emerge, such as: (1) fragmentation of services, (2) lack of attention to prevention and outreach, (3) impediments to entry into the system, (4) a significant lag time between provision of care and payment for it, (5) citizens of at least one area express dissatisfaction with the present system, (6) lack of availability of services, and (7) the high cost of health care.

Given that problems did exist, the next step was to try to determine if indeed the establishment of an HMO plan was feasible. Could a sufficient number of the population be enrolled to make the plan viable? Where would these enrollees come from? What specific HMO models would be suitable for the needs of the Peninsula? These questions were explored and possible answers posited. Goals were established and then objectives listed to meet these goals. Then three organizational strategies were described to satisfy these objectives. As with any innovative plan, resistance is bound to arise. We have listed a number of suggestions to lessen this opposition.

We must admit that our models may not satisfy all the needs of all members of the included population. There is still much research to be done before a final suggested model can actually be presented to the community for adoption.

As pointed out earlier, it must be determined if the enrollees to the plan will be concentrated in specific areas or if they would be dispersed over a wide area. This knowledge is necessary to better determine the best location or locations of primary health care centers and/or satellite clinics.

We also pointed out that there are a number of people who are medically indigent, that is the group whose income is too high to qualify for Medi-Cal and yet cannot afford to pay the premiums for quality health care insurance. This information will be particularly important in determining the amount of subsidy that might be required to operate an HMO plan that would meet the needs of this select group.

A closer look should be given to the health care plans that are presently being offered on the Peninsula to be sure that a proposed HMO plan would be competitive. We recommend a systems analysis cost study comparing proposed alternatives with existing plans.

The inevitable National Health Care Insurance legislation, whenever it finally passes, will no doubt have an impact on any existing plan and will probably require a number of changes to be implemented.

As the study approaches the final stages, more areas to be researched will evolve and perhaps resistance will increase. We conjecture that perseverance on the part of those honestly

seeking to improve the health care delivery system for the welfare of all concerned will result in the eventual acceptance of an HMO type plan.

APPENDIX

Map I	Monterey Peninsula
Map II	A - Silas B. Hayes Army Hospital, Fort Ord
Map III	B - Hilborne Hacienda, Seaside
	C - County Health and Welfare Building Site, Seaside
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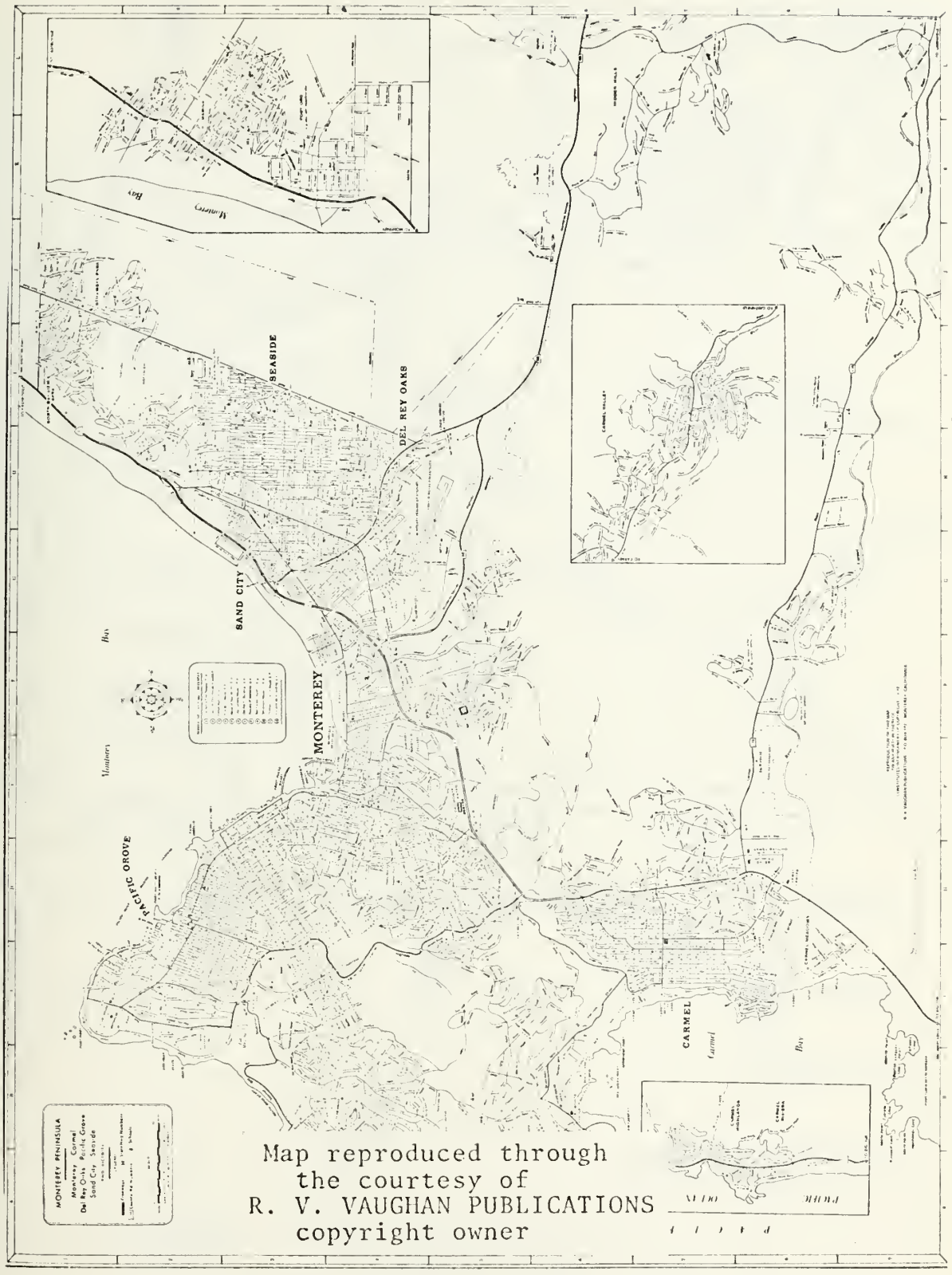
	J - Monterey Convalescent Hospital
	K - Monterey Hospital, Ltd.
Map VI	L - Pacific Grove Convalescent Hospital, Pacific Grove
Map VII	M - Carmel Convalescent Hospital, Carmel



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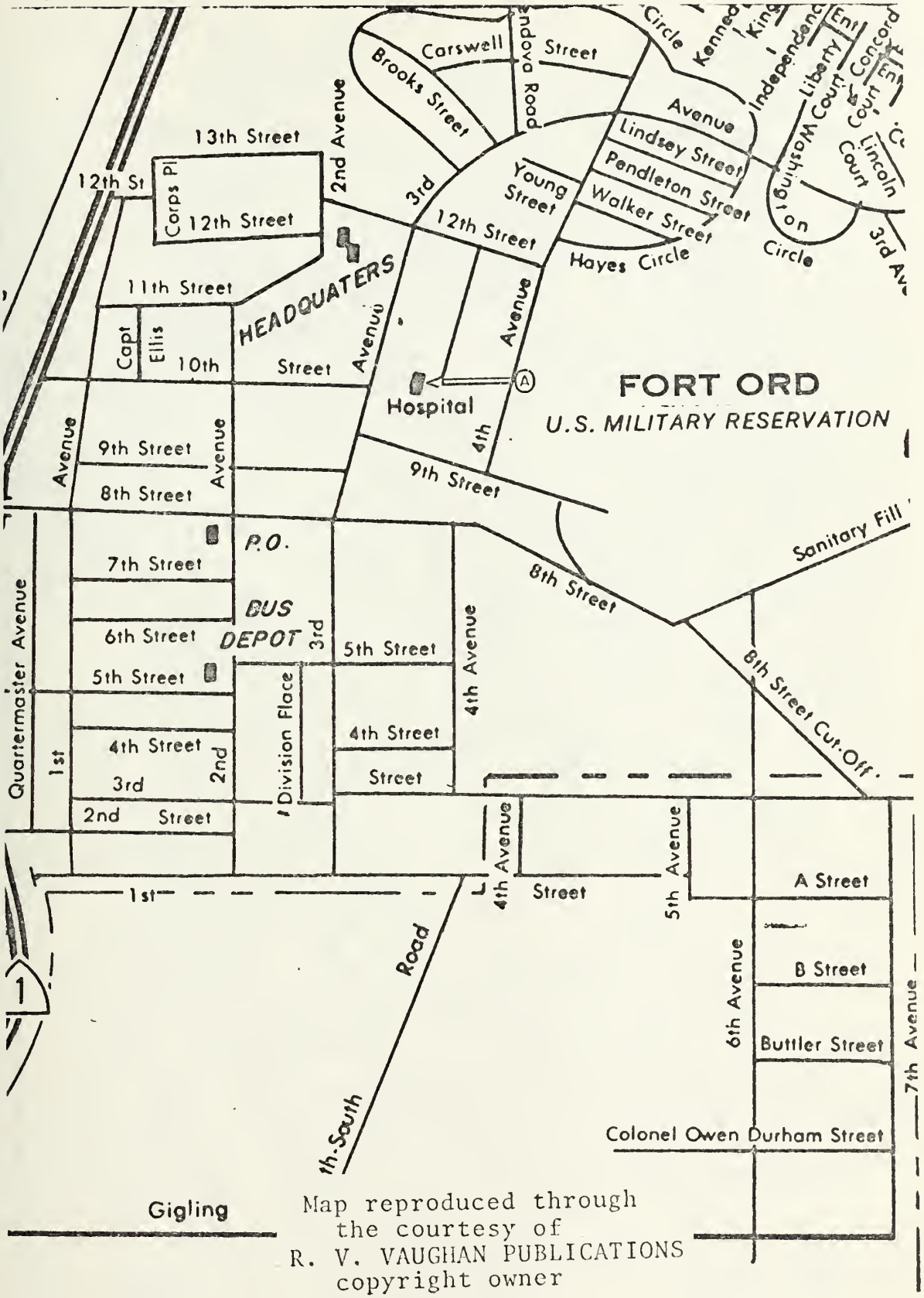

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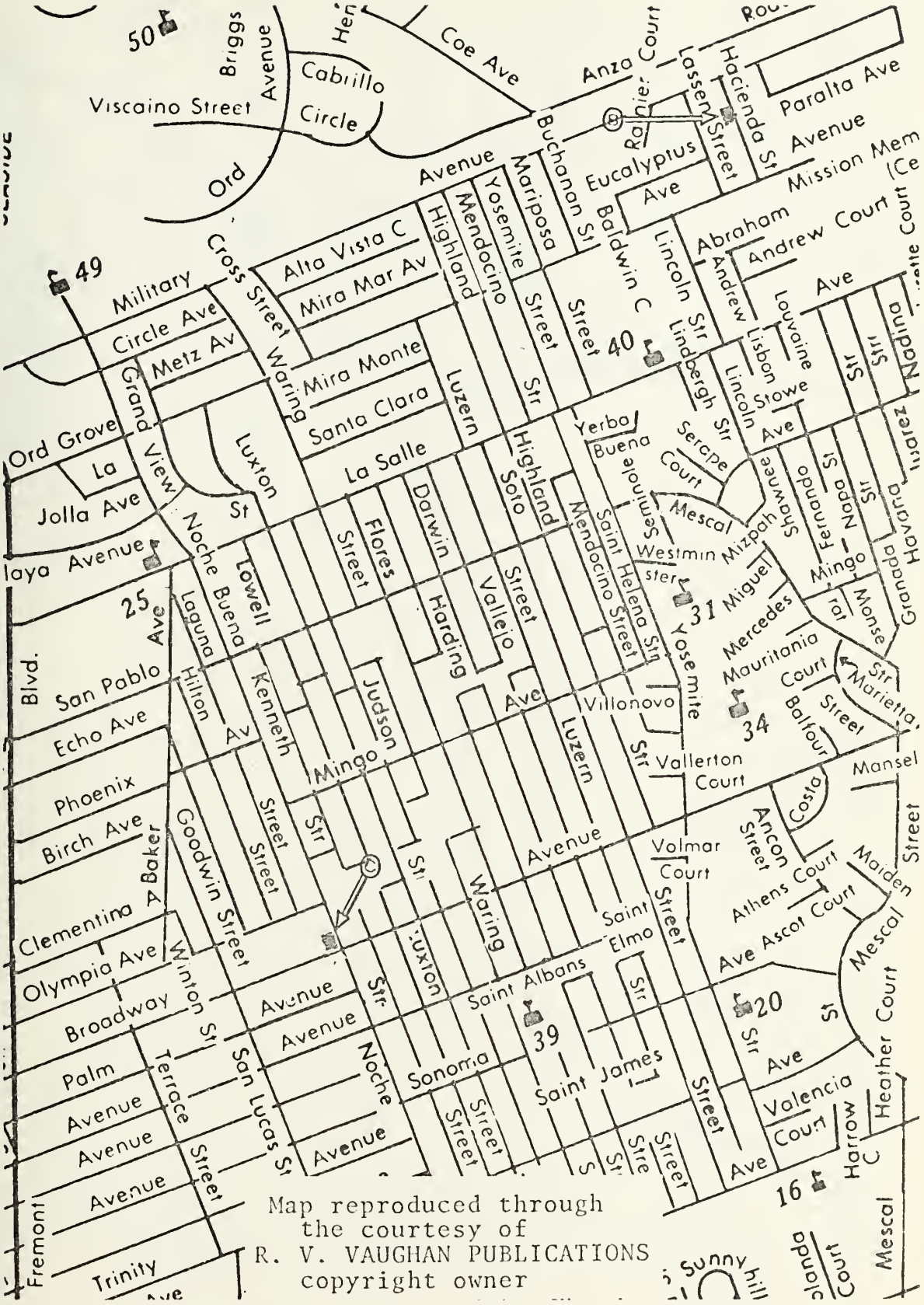
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Metz Av
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Andrew
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Yerba Buena
Serape Court
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Clementina
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Saint James
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Harrow
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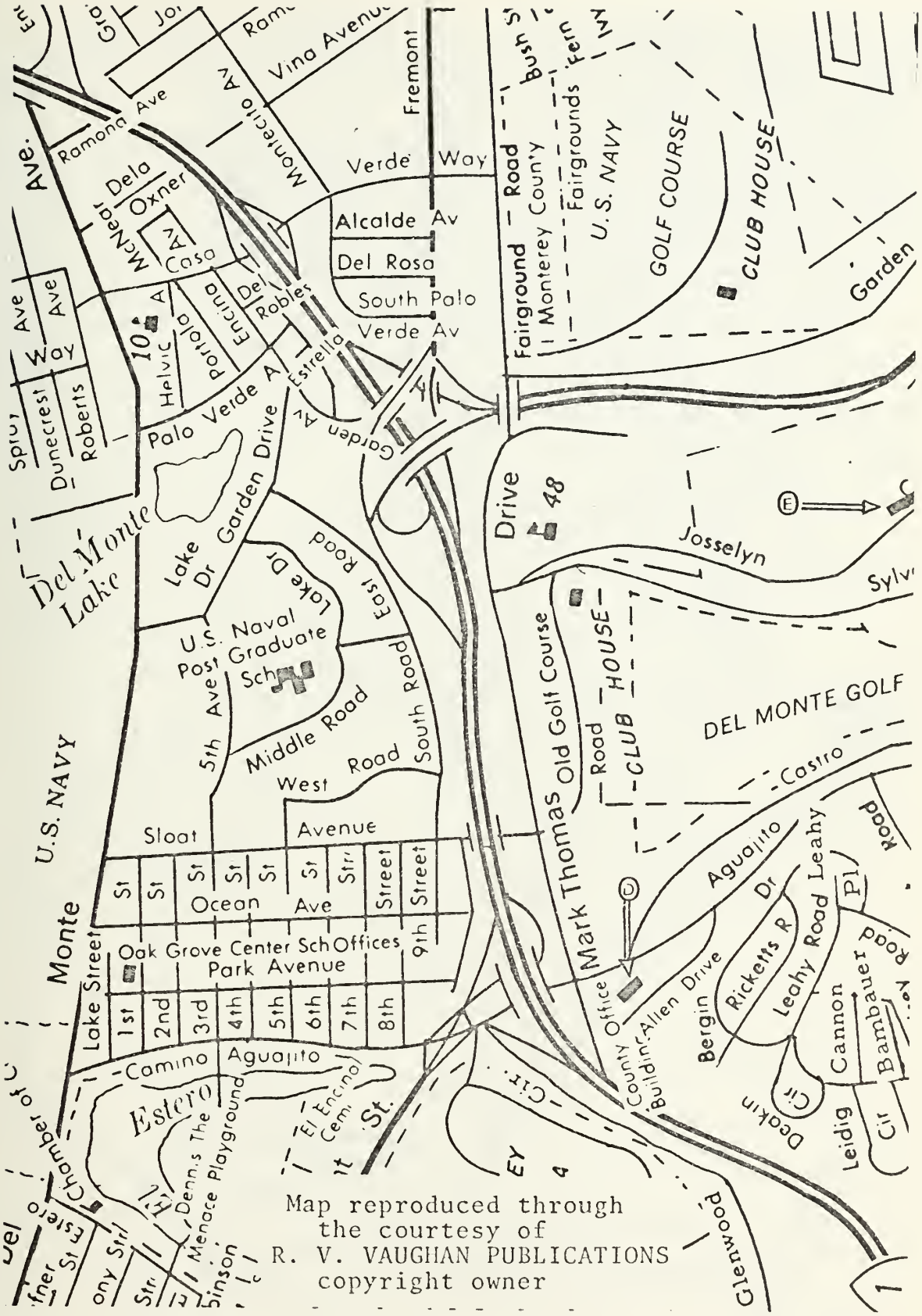
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Dela Oxner
McNeil Casa Av
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Encina
Portola
Helvic
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Dunecrest
Roberts
Sprucrest
Ave
Way
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Fern Ave
U.S. NAVY
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CLUB HOUSE
Garden
Drive
48
Josselyn
Sylv
Old Golf Course
Road
CLUB HOUSE
DEL MONTE GOLF
Castro
Mark Thomas
Aguajito
Dr
Leahy Road
Pl
Road
Ricketts R
Bergin Drive
County Office Building
Allen
Cannon
Bambauer Road
Cir
Leidig
Dockin
Glenwood
U.S. NAVY
Monte
Lake Street
Oak Grove Center Sch
Offices
Park Avenue
Sloat
Avenue
Ocean Ave
5th Ave
Middle Road
West Road
South Road
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Camino Aguajito
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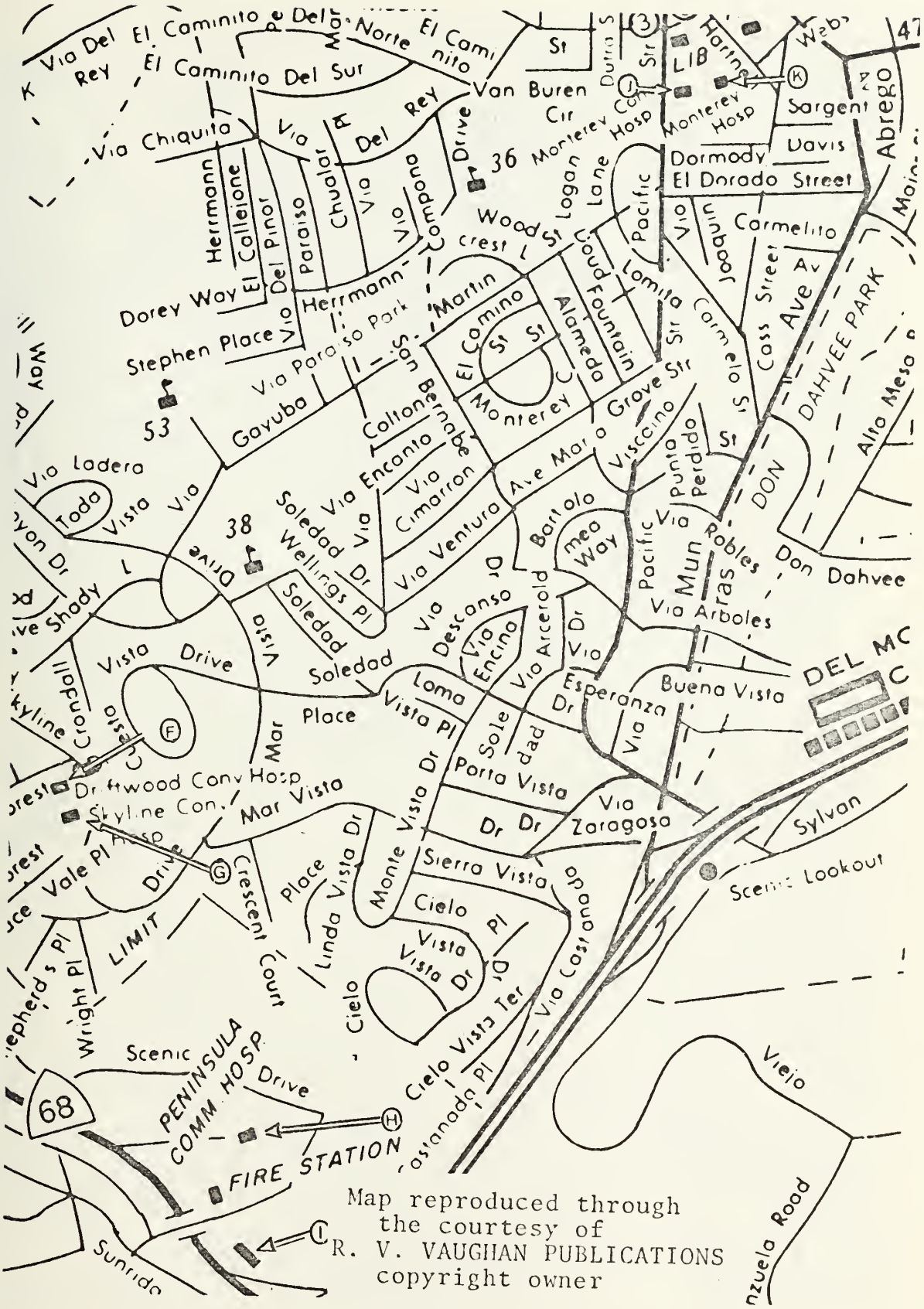

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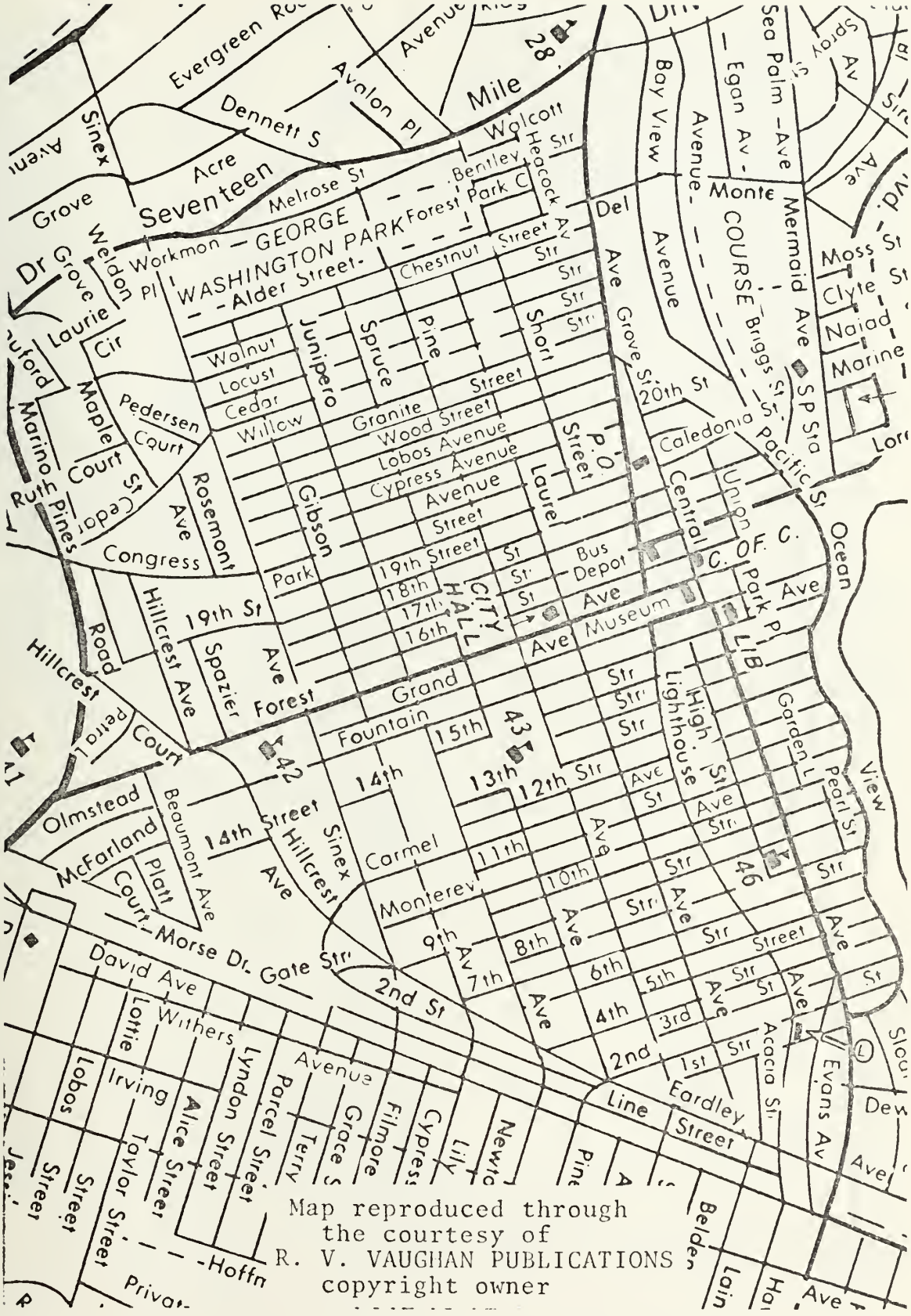

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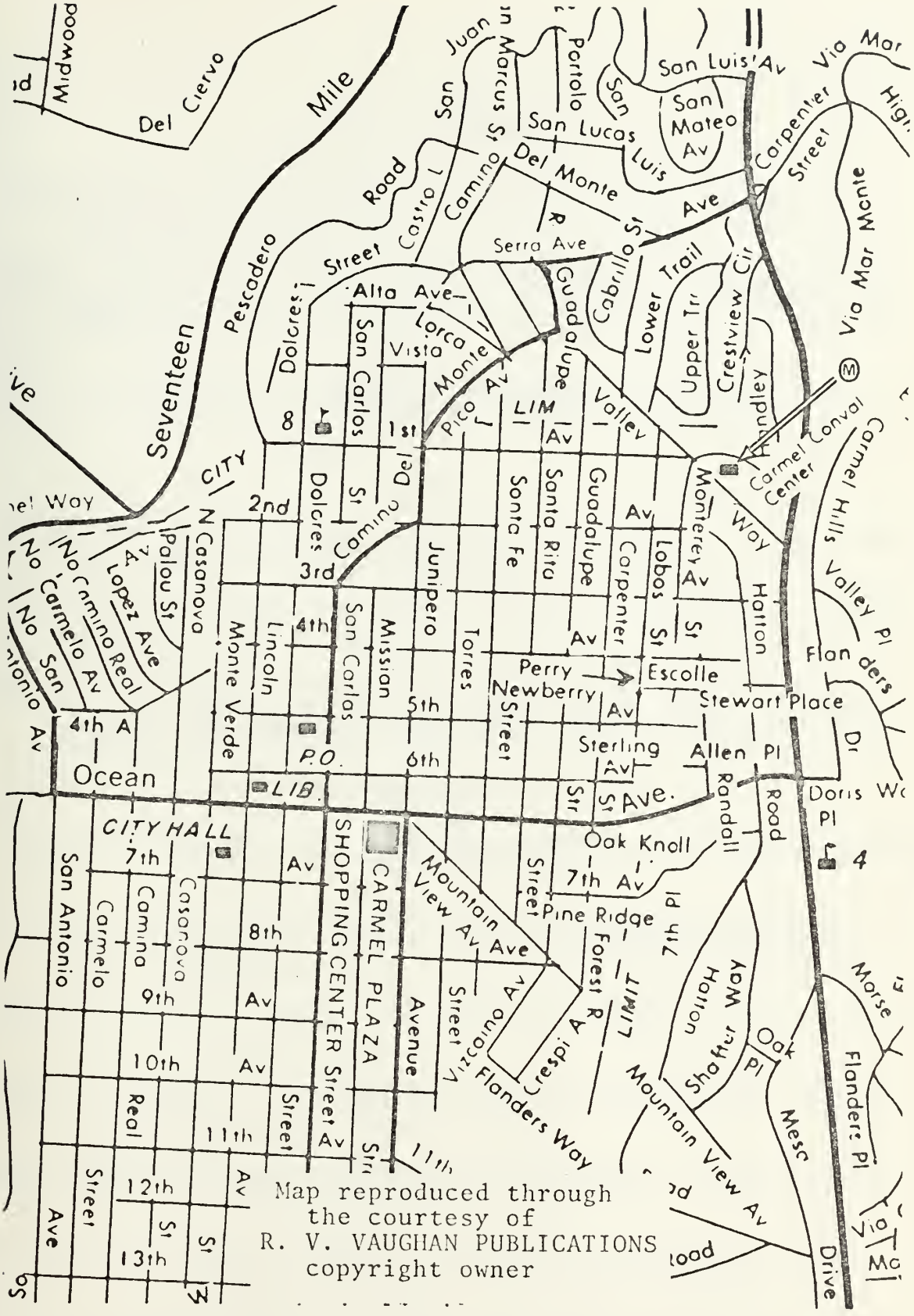
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Serra Ave
Alta Ave
Dolores
San Carlos
Vista Lorca
Monte
Guadalupe
Cabrillo
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Crestview Cir
Lindley
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Pico
LIM
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Junipero
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Ocean
P.O.
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6th
Perry Newberry
Escolle
Stewart Place
Sterling Av
Allen Pl
Dr
Doris
Randall
Road
Oak Knoll
7th Av
Pine Ridge
Mountain View Av
Ave
Forest
LIMIT
Shafter Way
Hatton
Oak Pl
Morse
Flanders Pl
Mesc
Drive
CITY HALL
7th
8th
9th
10th
11th
12th
13th
San Antonio
Carmelo
Camino
Casanova
Real
Street
Ave
SHOPPING CENTER
CARMEL PLAZA
Avenue
Vizcaino
Crespi
Flanders Way
Mountain View Av
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MAP VII

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